SRI A B R GOVERNMENT DEGREE COLLEGE
Repalle, Guntur Dt.522 265
Accredited by NAAC with ' B' Grade, Affiliated to Acharya Nagarjuna University

Department of Computer Science

Online Certificate Course

on

Core Python

Co-ordinator

P. ARUN KUMAR

Lecturer in Computer Science

(28th April to 14th May 2020)

This Course Aims. . .

This course aims to teach everyone the basics of programming computers using Python. We cover the basics of how one constructs a program from a series of simple instructions in Python.

This Course Mainly Covers . . .

- ✓ Importance of Python Language
- ✓ Types, Operators and Expressions
- ✓ Data Structures
- ✓ Usage of Python packages

This Course Assess the Students with. . .

- ✓ Assignments
- ✓ Online Quizzes

Course Objectives:

- Leaning the fundamentals of writing Python programs.
- Learn core Python scripting elements such as variables and flow control structures
- work with lists and sequence data
- Write Python functions to facilitate code reuse
- Work with the Python standard library

Course Outcomes:

Upon successful completion of the course, students will be familiar with Python programming language and able to

- ✓ Easily read and write code in python language.
- ✓ Describe the Numbers, Math functions, Strings, List, Tuples and Dictionaries in Python
- ✓ Express different Decision-making statements and Functions.

Course Syllabus

Introduction

- ✓ Why Python
- ✓ Features
- ✓ Basic Syntax
- ✓ Variable and Data Types
- ✓ Operator

Conditional Statements

- ✓ If
- ✓ If- else
- ✓ Nested if-else

Looping

- ✓ For
- ✓ While
- ✓ Nested loops

Control Statements

- ✓ Break
- ✓ Continue
- ✓ Pass

String Manipulation

- ✓ Accessing Strings
- ✓ Basic Operations
- ✓ String slices
- ✓ Function and Methods

Lists

- ✓ Introduction
- ✓ Accessing list
- ✓ Operations

- ✔ Working with lists
- ✔ Function and Methods

Tuple

- ✔ Introduction
- ✔ Accessing tuples
- ✔ Operations
- ✔ Working
- ✔ Functions and Methods

Dictionaries

- ✔ Introduction
- ✔ Accessing values in dictionaries
- ✔ Working with dictionaries
- ✔ Properties
- ✔ Functions

Functions

- ✔ Defining a function
- ✔ Calling a function
- ✔ Types of functions
- ✔ Function Arguments

Working with packages

- ✔ Introduction to numpy
- ✔ working with numpy package.

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Course Brochure

SRI A B R GOVERNMENT DEGREE COLLEGE

REPALLE, GUNTUR (DT) — 522 265

Department of Computer Science

Certificate course on

Core Python

Starting from 27th April 2020.. Duration 15days

Aim :

This course aims to teach everyone the basics of programming computers using Python. We cover the basics of how one constructs a program from a series of simple instructions in Python.

Timings : 10 AM - 11 AM

Course covers :

Importance of Python Language
Types, Operators and Expressions
Data Structures
Usage of Python packages

Assessment of Student :-

Online Quizzes
Assignments

Interested students can fill the online registration form
On or before 27th April 2020.

In-charge of computer science

Principal

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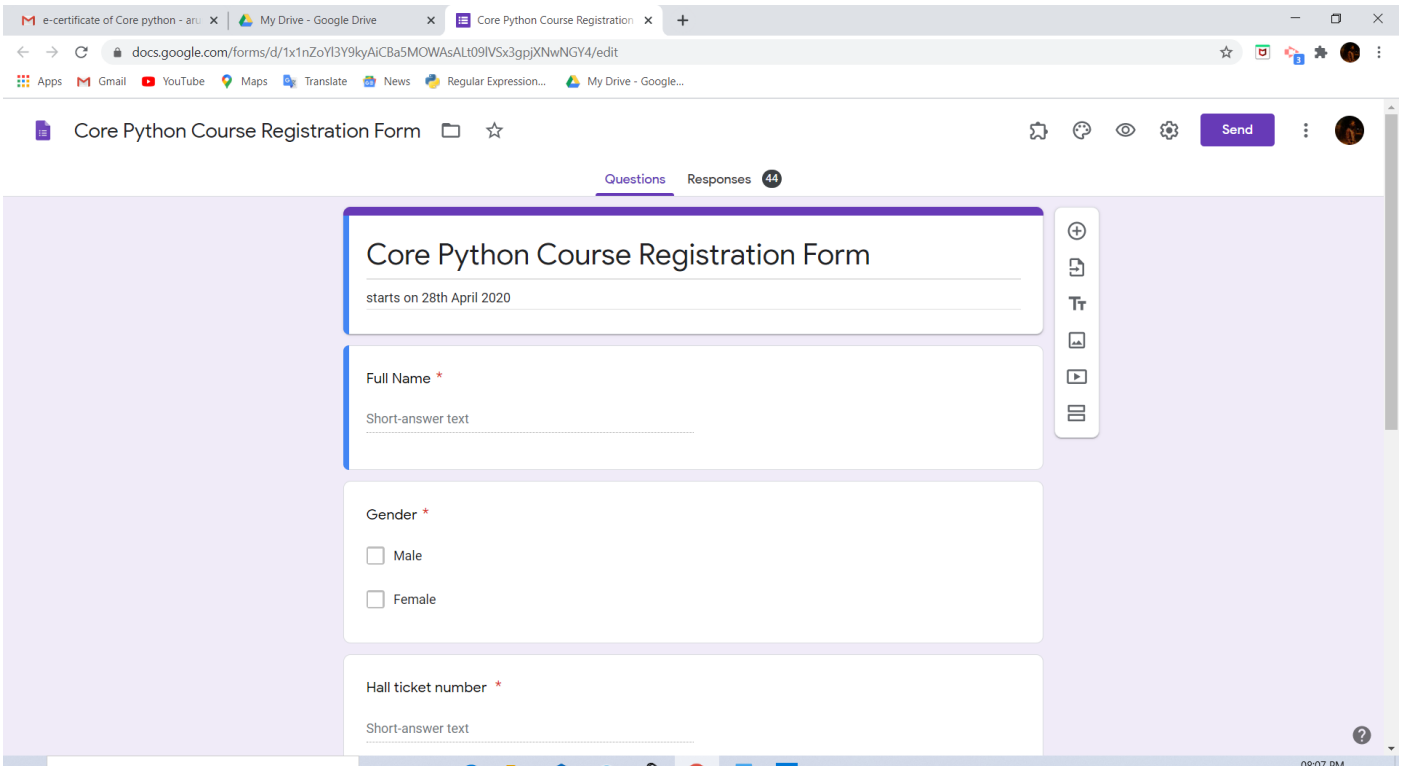
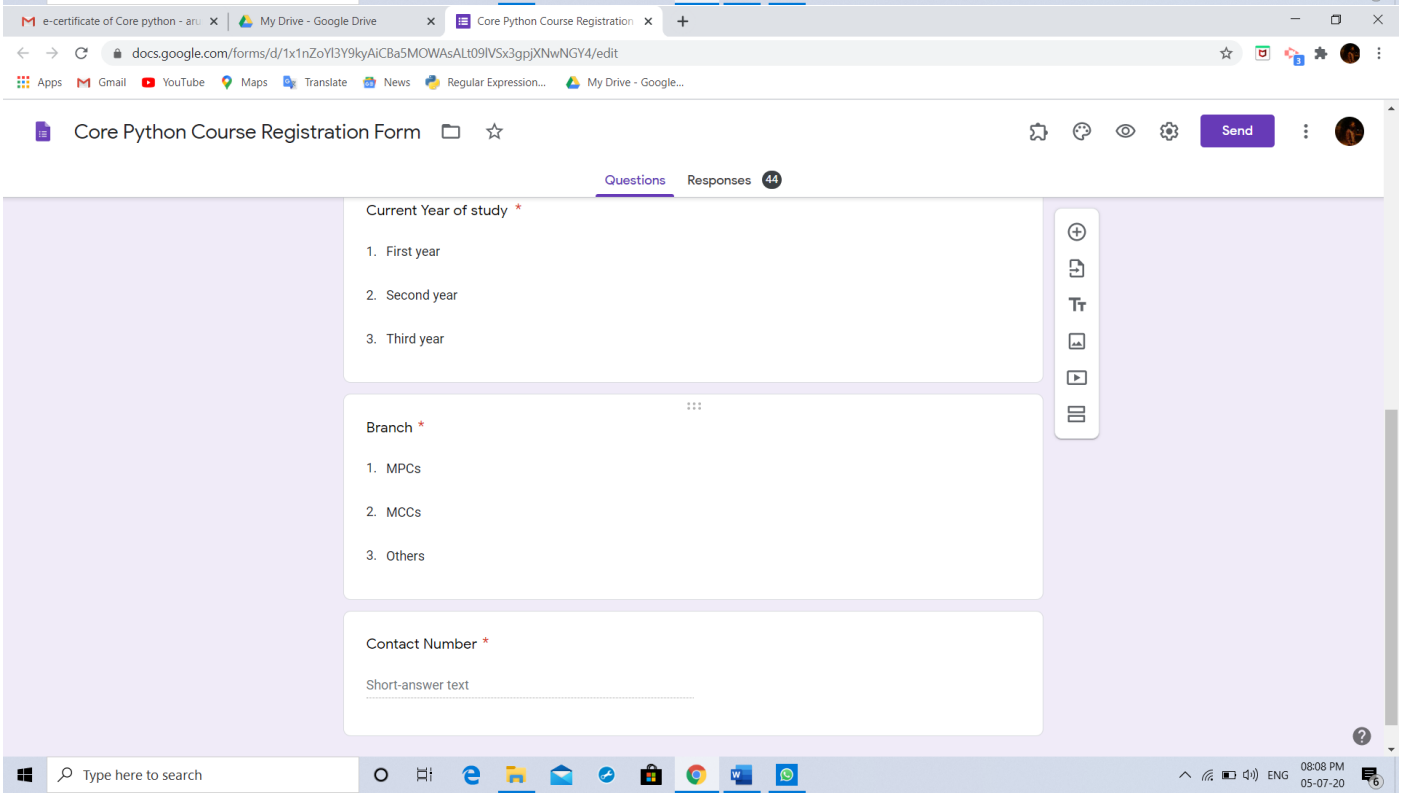
Course Registration Form





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Course Registered Students List

Timestamp	Full Name	Gender	Hall ticket numbe	Current Year	Branch	Contact Number
22/04/2020 14:40:26	DARA NAGASAI	Male	Y173072010	Third year	MCCs	7893840509
22/04/2020 14:53:24	v.v.s.sukanya	Female	Y173072040	Third year	MCCs	9398806515
22/04/2020 14:58:54	Kandula Navya	Female	Y173072016	Third year	MCCs	6281333209
22/04/2020 15:01:09	v.v.s.sukanya	Female	Y173072040	Third year	MCCs	9398806515
22/04/2020 15:58:03	Borra. Swapna	Female	Y173072008	Third year	MCCs	6303883073
23/04/2020 10:26:52	Pasupuleti Balanaga Manikanta	Male	Y173072124	Third year	MPCs	8297486232
23/04/2020 19:45:35	Sayyed.nagamma	Female	Y173072036	Third year	MCCs	7036838210
26/04/2020 21:08:48	Kumar Vayala	Male	Y193072062	First year	MCCs	7993467334
26/04/2020 21:25:06	Maganti suresh	Male	Y193072038	First year	MCCs	8688081822
26/04/2020 21:37:05	Dokku satyanarayana	Male	Y193072025	First year	MCCs	9676709530
26/04/2020 21:37:30	N kranthi kumar	Male	Y193072043	First year	MCCs	7995388424
26/04/2020 21:38:41	Revathi priya Tiruveedhula	Female	Y193072136	First year	MPCs	9346860167
26/04/2020 21:40:51	Jithendra Mandali	Male	Y193072039	First year	MCCs	7780361370
26/04/2020 21:43:00	KALLEPALLI SAI Bhargav	Male	Y193072030	First year	MCCs	9963434064
26/04/2020 22:13:42	Janam Shanmukha Sainadh	Male	Y173072014	Third year	MCCs	9032334293
26/04/2020 22:21:38	Aluri Harsha Vardhan	Male	Y193072015	First year	MCCs	9573343139
27/04/2020 01:39:20	Jithendra Mandali	Male	Y193072039	First year	MCCs	7780361370
27/04/2020 07:02:11	Nalluri Lakshmi	Female	Y193072130	First year	MPCs	9392445683
27/04/2020 08:22:53	B.Teja Eswara Sai	Male	Y193072019	First year	MCCs	9666724520
27/04/2020 08:27:07	Radha Krishna D	Male	Y193072023	First year	MCCs	7032766628
27/04/2020 08:43:01	I Leela Naga koteswararao	Male	Y193072116	First year	MPCs	9346754255
27/04/2020 08:44:38	I Leela Naga koteswararao	Male	Y193072116	First year	MPCs	9346754255
27/04/2020 08:47:44	Deeviharika	Female	Y193072107	First year	MPCs	9346715179
27/04/2020 09:12:42	Parisa pavan kalyan	Male	Y193072132	First year	MPCs	8096628009
27/04/2020 09:14:49	Parisa Venkata Siva Gopi	Male	Y183072105	Second year	MPCs	6303627671
27/04/2020 09:34:39	Yaragalla sivani	Female	Y193072066	First year	MCCs	8790705430
27/04/2020 09:36:23	Yaragallasivani	Female	Y193072066	First year	MCCs	8790705430
27/04/2020 09:42:23	Yaragalla sivani	Female	Y193072066	First year	MCCs	8790705430
27/04/2020 09:43:14	Kadavakollu gayatri	Female	Y193072118	First year	MPCs	6305859392
27/04/2020 09:44:19	Yaragalla sivani	Female	Y193072066	First year	MCCs	8790705430
27/04/2020 09:45:22	D.somesh	Male	Y193072110	First year	MPCs	7013259533
27/04/2020 09:46:20	Yaragalla sivani	Female	Y193072066	First year	MCCs	8790705430
27/04/2020 09:49:50	Kadavakoll gayatri	Female	Y193072118	First year	MPCs	6305859392
27/04/2020 09:51:40	Bharath Thunuguntla	Male	Y193072101135	First year	MPCs	9347856952
27/04/2020 10:11:10	Itta Leela Naga koteswararao	Male	Y193072116	First year	MPCs	9346754255
27/04/2020 10:27:14	Chippala leela sai	Male	Y193072106	First year	MPCs	6281361126
27/04/2020 11:20:28	k.srinath	Male	Y193072120	First year	MPCs	7013969304
27/04/2020 12:05:02	Chippala jasmitha	Female	Y193072021	First year	MCCs	9014187864
27/04/2020 12:05:25	Chippala jasmitha	Female	Y193072021	First year	MCCs	9014187864
27/04/2020 15:19:16	Nayudu gangoli	Male	Y193072042	First year	MCCs	9959851021
27/04/2020 19:25:28	Allaparthi Sudharshan	Male	Y173072046	Third year	Others	9505648292
27/04/2020 21:06:04	Gudavalli pavan gopi	Male	Y193072115	First year	MPCs	7993969197

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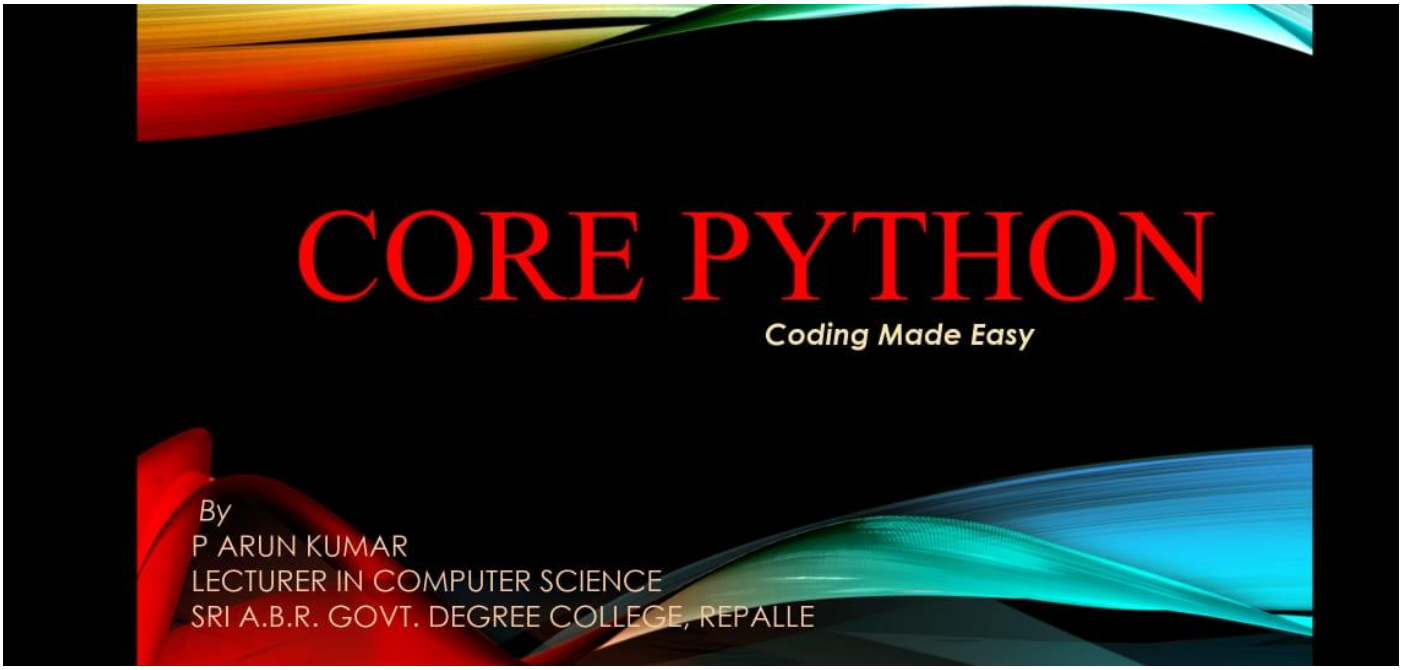

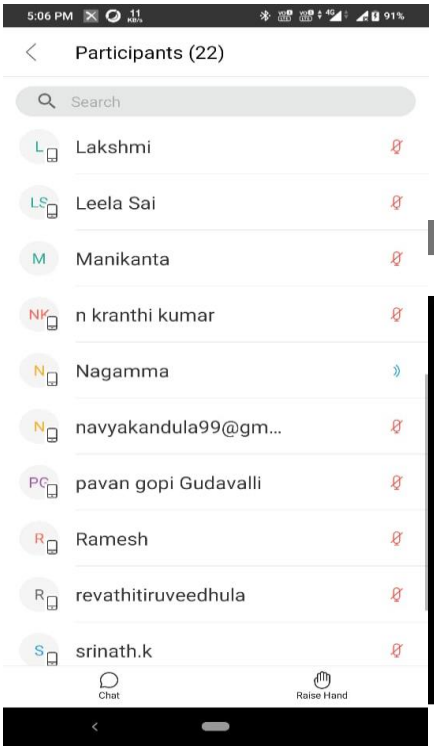

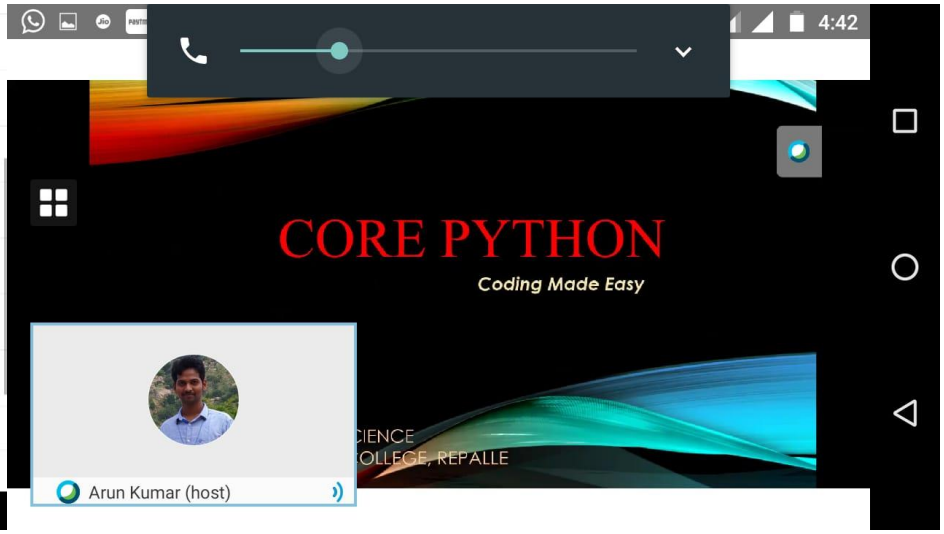

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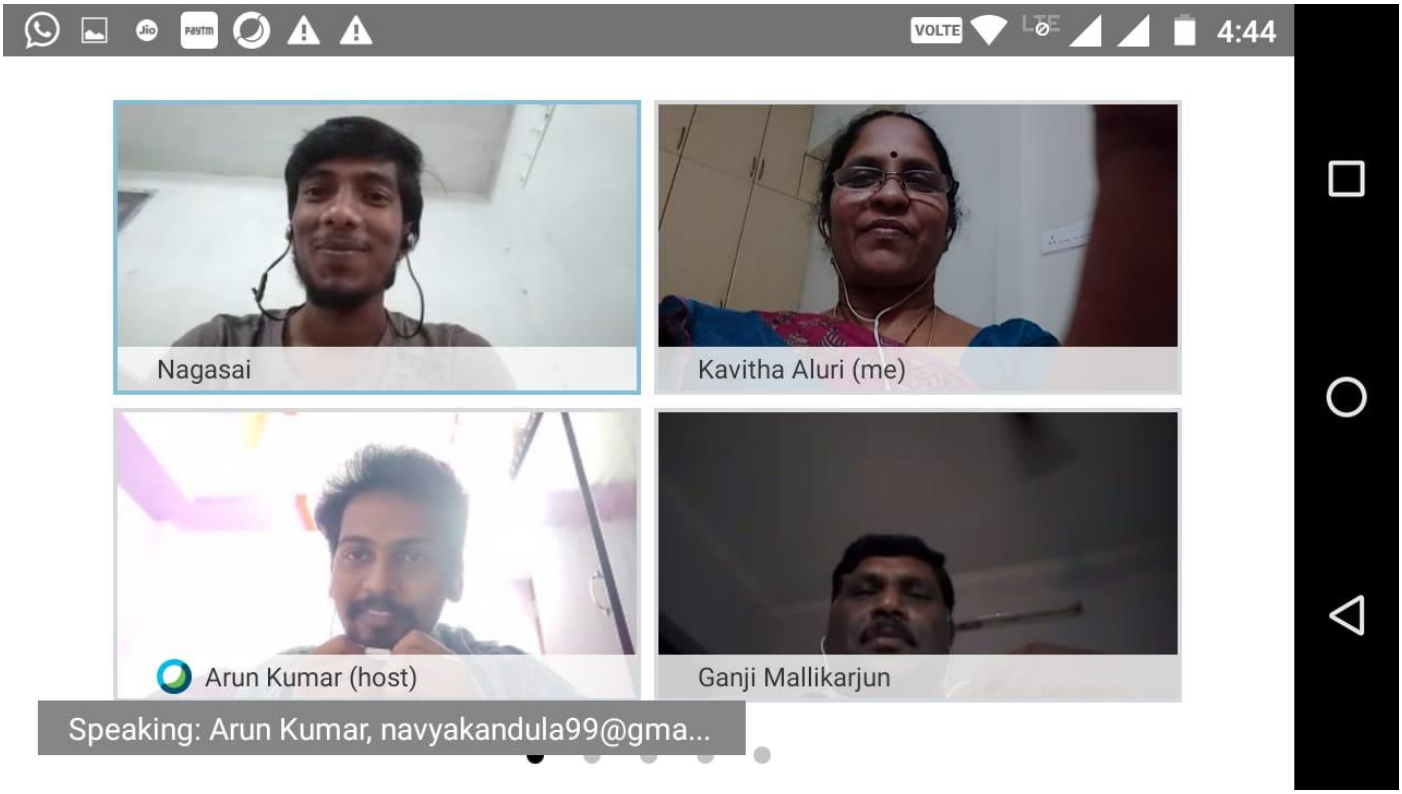

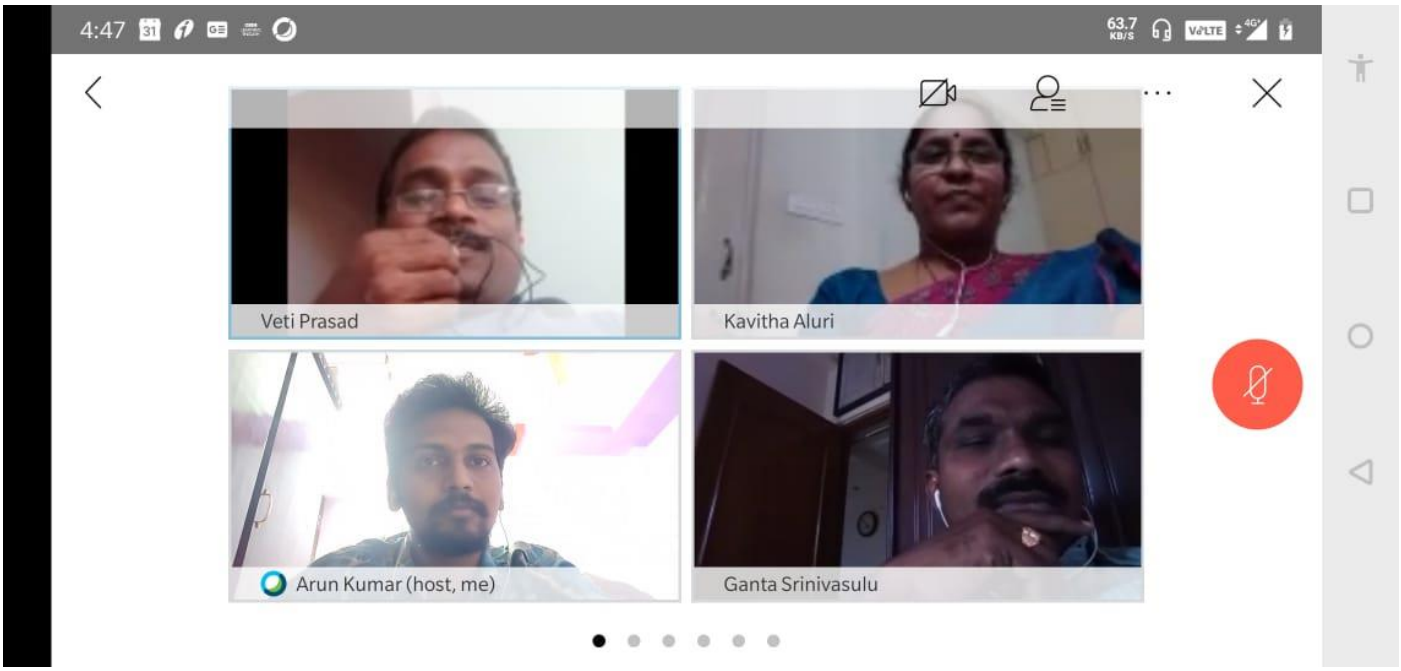

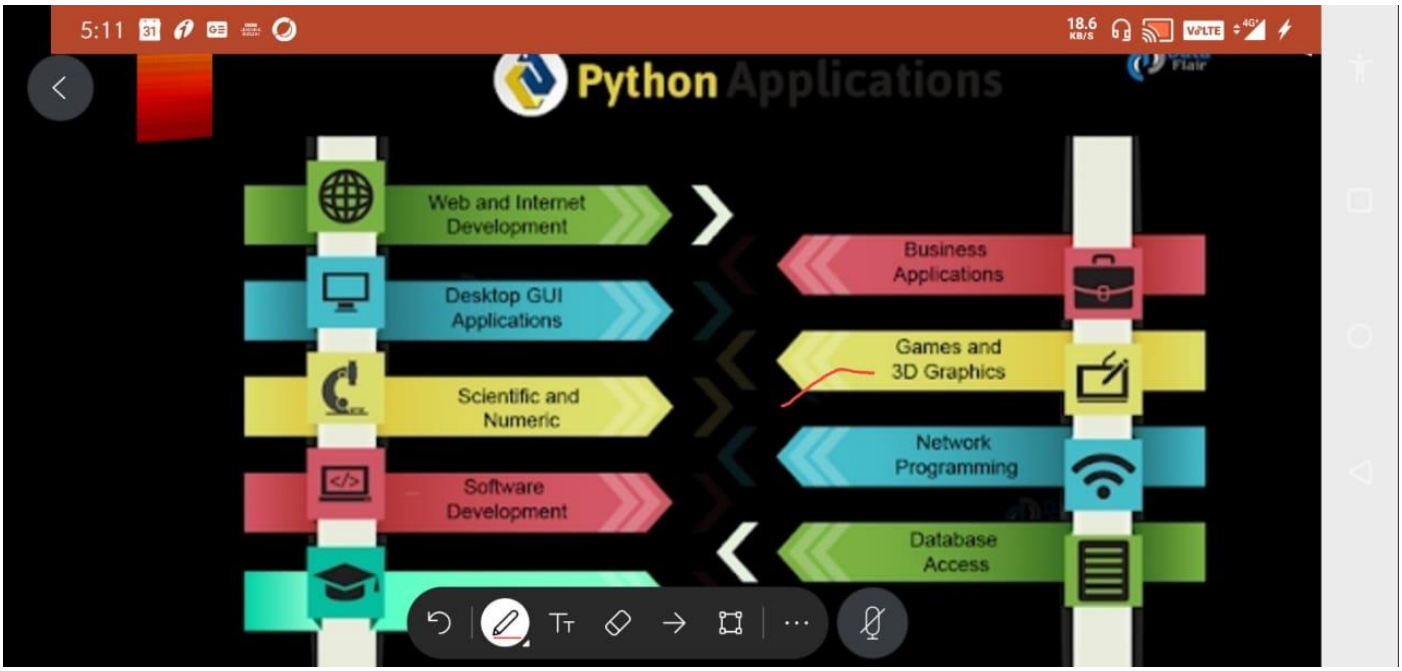


```
19:06
No. 1  NEW  CTRL
Type "help", "copyright", "credits" or "li
cense" for more information.
>>> a=5
>>> a
5
>>> b="hello"
>>> b
'hello'
>>> a,b,c=1,2,3
>>> a
1
>>> b
2
>>> c
3
>>> type(a)
<class 'int'>
>>> class
  File "<stdin>", line 1
    class
        ^
SyntaxError: invalid syntax
>>> s=12
>>> type(s)
<class 'int'>
>>> s=123.35
>>> type(s)
<class 'float'>
>>> a=i+3jx
  File "<stdin>", line 1
    a=i+3jx
          ^
SyntaxError: invalid syntax
>>> a=3j
```

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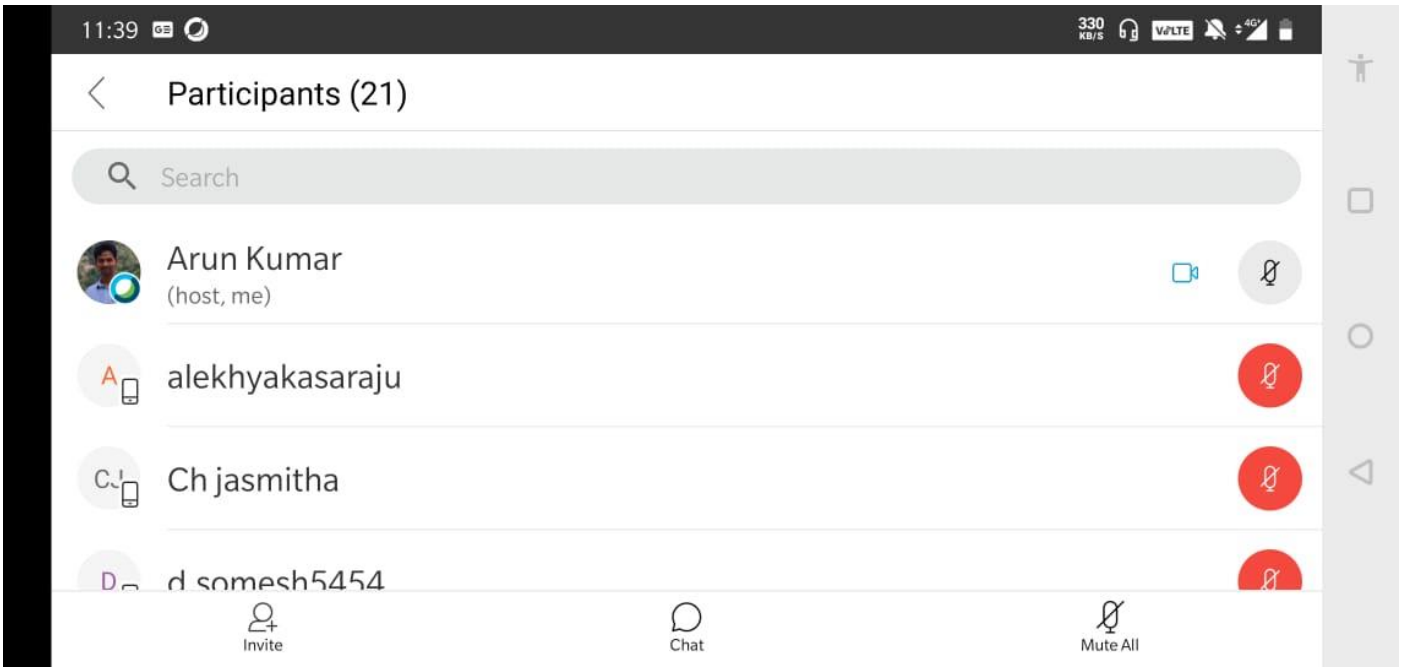
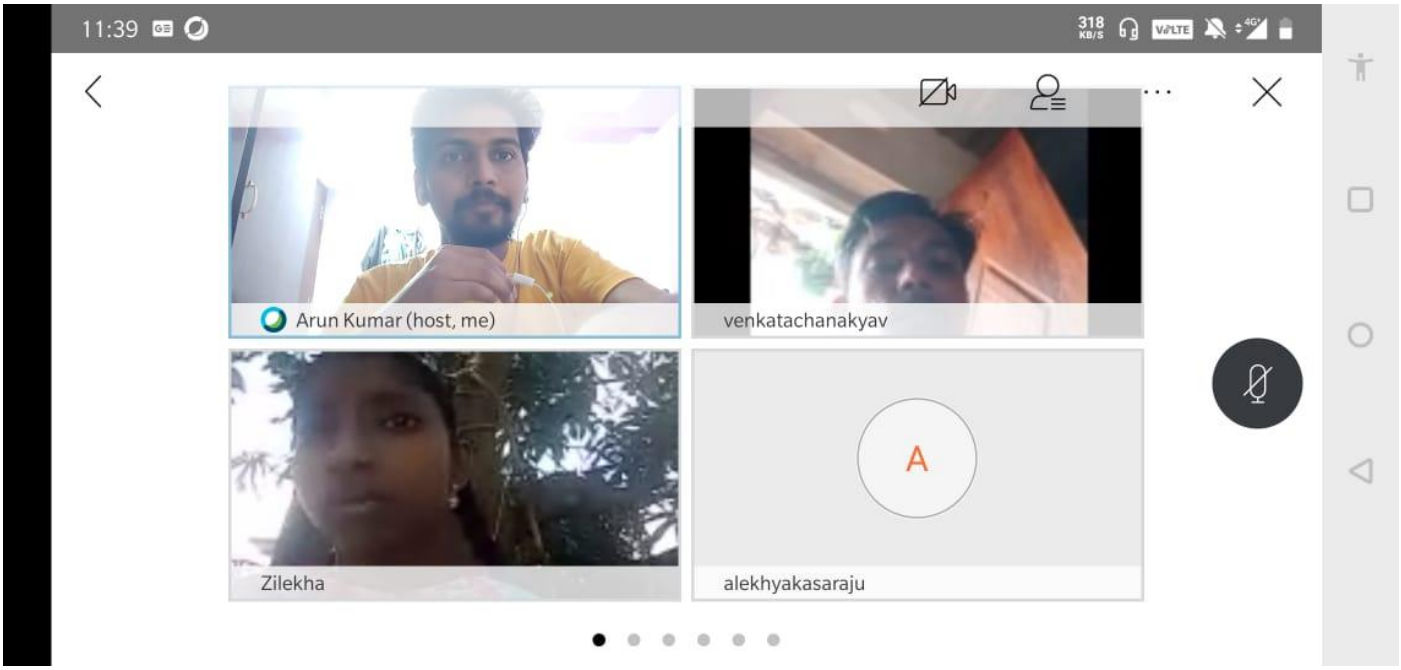
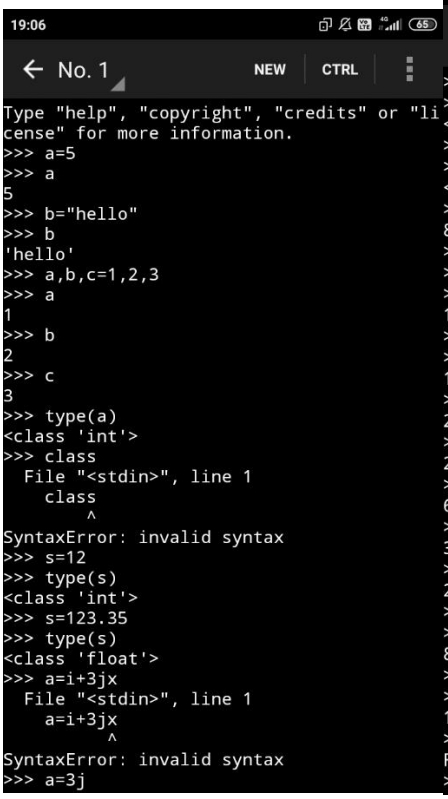
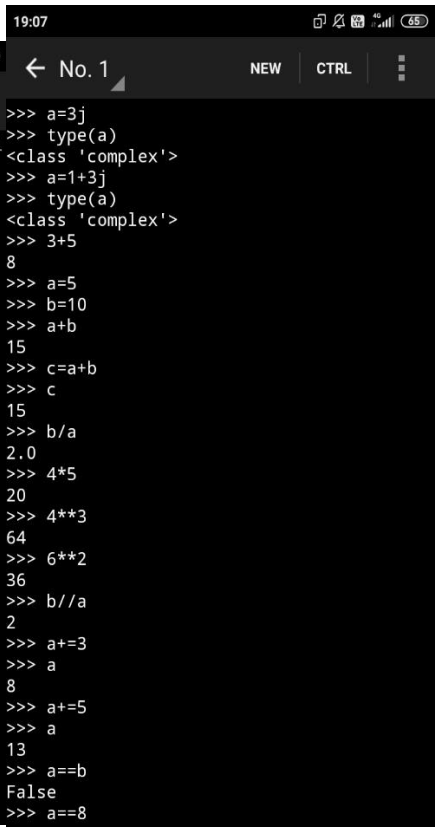




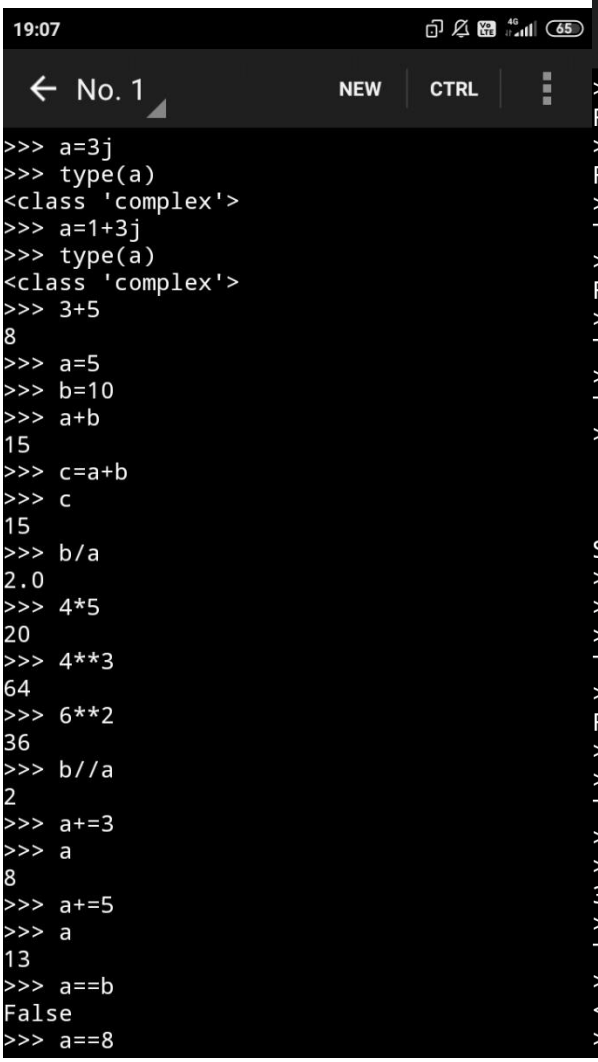


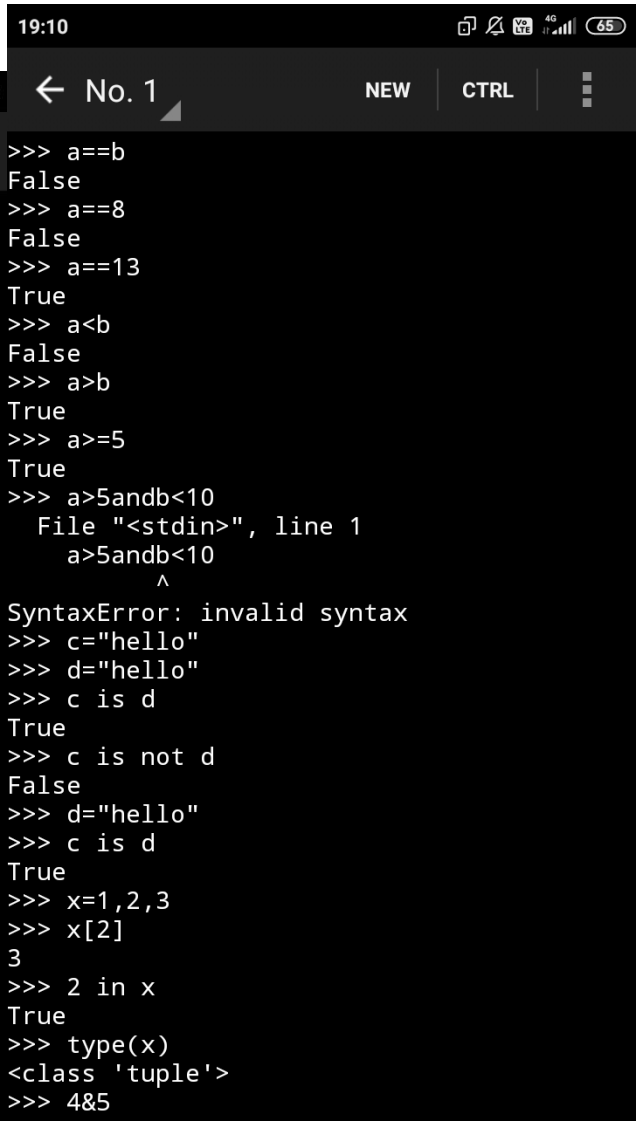


Python Bitwise Operators

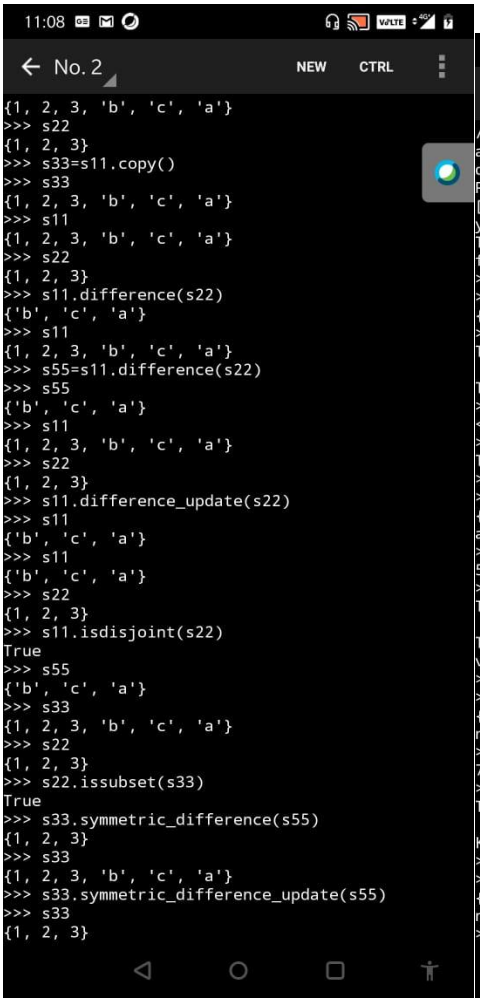
Bitwise operators are used to compare (binary) numbers:

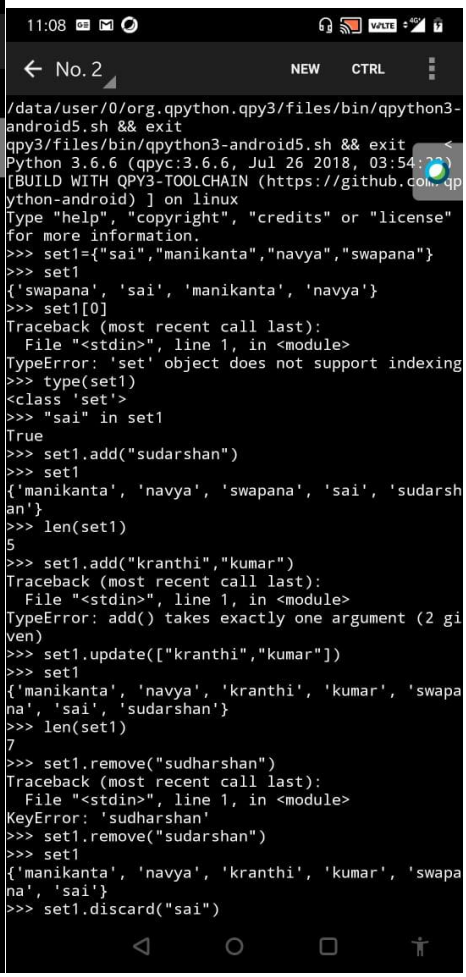
Operator	Name	Description
&	AND	Sets each bit to 1 if both bits are 1
|	OR	Sets each bit to 1 if one of two bits is 1
^	XOR	Sets each bit to 1 if only one of two bits is 1
~	NOT	Inverts all the bits
<<	Zero fill left shift	Shift left by pushing zeros in from the right and let the leftmost bits fall off
>>	Signed right shift	Shift right by pushing copies of the leftmost bit in from the left, and let the rightmost bits fall off

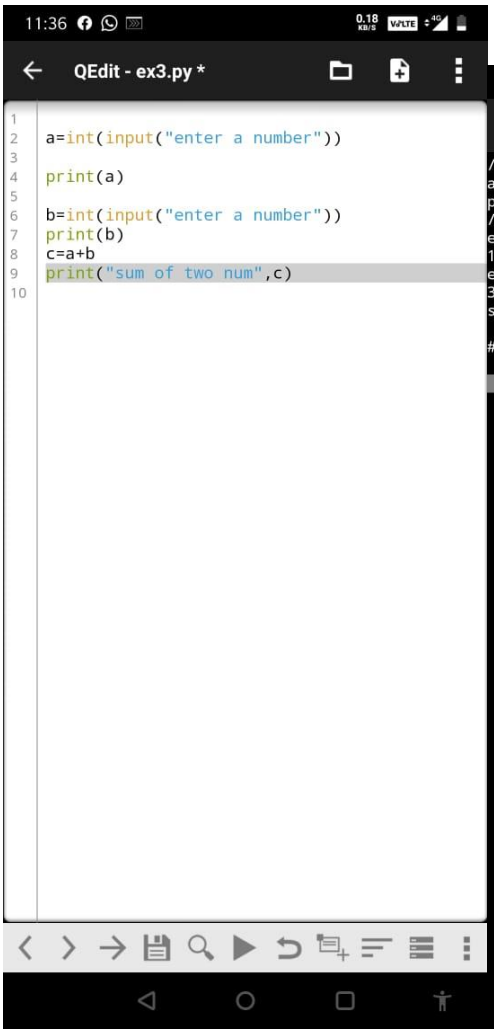

19:07
No. 1
NEW
CTRL
>>> a=3j
>>> type(a)
<class 'complex'>
>>> a=1+3j
>>> type(a)
<class 'complex'>
>>> 3+5
8
>>> a=5
>>> b=10
>>> a+b
15
>>> c=a+b
>>> c
15
>>> b/a
2.0
>>> 4*5
20
>>> 4**3
64
>>> 6**2
36
>>> b//a
2
>>> a+=3
>>> a
8
>>> a+=5
>>> a
13
>>> a==b
False
>>> a==8

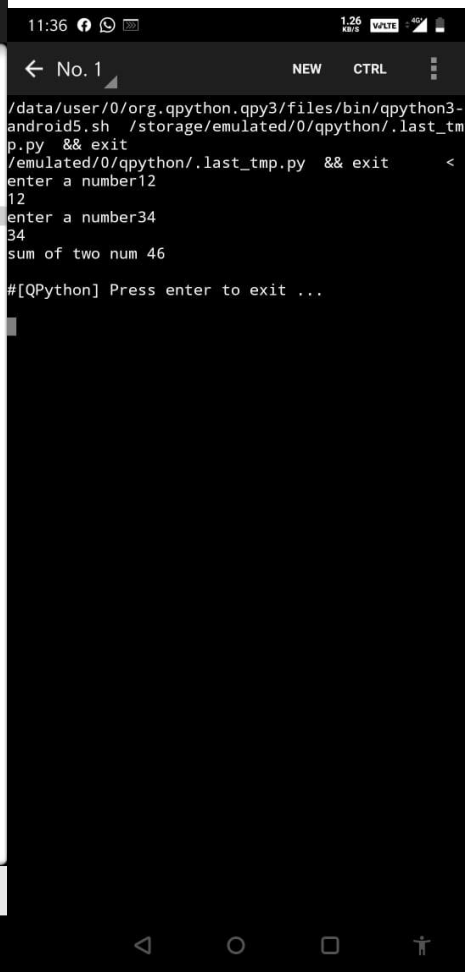

19:10
No. 1
NEW
CTRL
>>> a==b
False
>>> a==8
False
>>> a==13
True
>>> a<b
False
>>> a>b
True
>>> a>=5
True
>>> a>5andb<10
File "<stdin>", line 1
a>5andb<10
^
SyntaxError: invalid syntax
>>> c="hello"
>>> d="hello"
>>> c is d
True
>>> c is not d
False
>>> d="hello"
>>> c is d
True
>>> x=1,2,3
>>> x[2]
3
>>> 2 in x
True
>>> type(x)
<class 'tuple'>
>>> 4&5

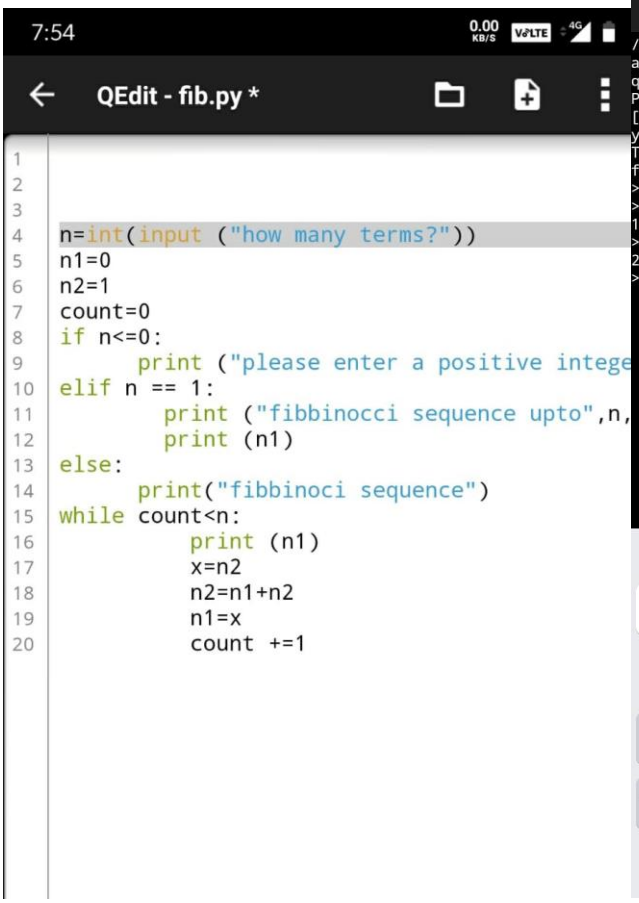
ljust()	Returns a left justified version of the string
lower()	Converts a string into lower case
lstrip()	Returns a left trim version of the string
maketrans()	Returns a translation table to be used in translations
partition()	Returns a tuple where the string is parted into three parts
replace()	Returns a string where a specified value is replaced with a specified value
rfind()	Searches the string for a specified value and returns the last position of where it was found
rindex()	Searches the string for a specified value and returns the last position of where it was found
rjust()	Returns a right justified version of the string
rpartition()	Returns a tuple where the string is parted into three parts
rsplit()	Splits the string at the specified separator, and returns a list


11:08
No. 2
NEW
CTRL
{1, 2, 3, 'b', 'c', 'a'}
>>> s22
{1, 2, 3}
>>> s33=s11.copy()
>>> s33
{1, 2, 3, 'b', 'c', 'a'}
>>> s11
{1, 2, 3, 'b', 'c', 'a'}
>>> s22
{1, 2, 3}
>>> s11.difference(s22)
{'b', 'c', 'a'}
>>> s11
{1, 2, 3, 'b', 'c', 'a'}
>>> s55=s11.difference(s22)
>>> s55
{'b', 'c', 'a'}
>>> s11
{1, 2, 3, 'b', 'c', 'a'}
>>> s22
{1, 2, 3}
>>> s11.difference_update(s22)
>>> s11
{'b', 'c', 'a'}
>>> s11
{'b', 'c', 'a'}
>>> s22
{1, 2, 3}
>>> s11.isdisjoint(s22)
True
>>> s55
{'b', 'c', 'a'}
>>> s33
{1, 2, 3, 'b', 'c', 'a'}
>>> s22
{1, 2, 3}
>>> s22.issubset(s33)
True
>>> s33.symmetric_difference(s55)
{1, 2, 3}
>>> s33
{1, 2, 3, 'b', 'c', 'a'}
>>> s33.symmetric_difference_update(s55)
>>> s33
{1, 2, 3}


11:08
No. 2
NEW
CTRL
/data/user/0/org.qpython.qpy3/files/bin/qpython3-android5.sh && exit
qpy3/files/bin/qpython3-android5.sh && exit
Python 3.6.6 (qpyc:3.6.6, Jul 26 2018, 03:54:
[BUILD WITH QPY3-TOOLCHAIN (https://github.com/qpython-android)] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> set1={"sai","manikanta","navya","swapana"}
>>> set1
{'swapana', 'sai', 'manikanta', 'navya'}
>>> set1[0]
Traceback (most recent call last):
File "<stdin>", line 1, in <module>
TypeError: 'set' object does not support indexing
>>> type(set1)
<class 'set'>
>>> "sai" in set1
True
>>> set1.add("sudarshan")
>>> set1
{'manikanta', 'navya', 'swapana', 'sai', 'sudarshan'}
>>> len(set1)
5
>>> set1.add("kranthi","kumar")
Traceback (most recent call last):
File "<stdin>", line 1, in <module>
TypeError: add() takes exactly one argument (2 given)
>>> set1.update(["kranthi","kumar"])
>>> set1
{'manikanta', 'navya', 'kranthi', 'kumar', 'swapana', 'sai', 'sudarshan'}
>>> len(set1)
7
>>> set1.remove("sudharshan")
Traceback (most recent call last):
File "<stdin>", line 1, in <module>
KeyError: 'sudharshan'
>>> set1.remove("sudarshan")
>>> set1
{'manikanta', 'navya', 'kranthi', 'kumar', 'swapana', 'sai'}
>>> set1.discard("sai")

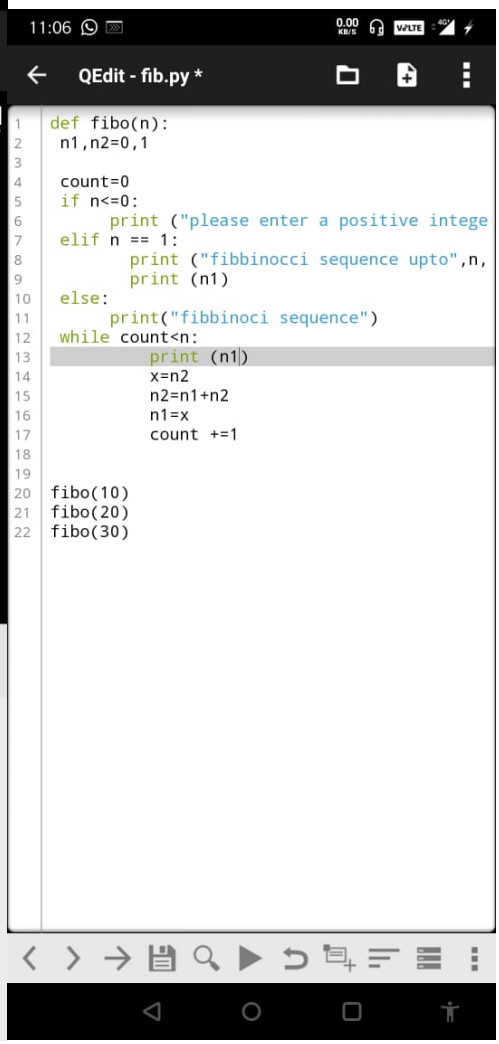

11:36
QEdit - ex3.py *
a=int(input("enter a number"))
print(a)
b=int(input("enter a number"))
print(b)
c=a+b
print("sum of two num",c)

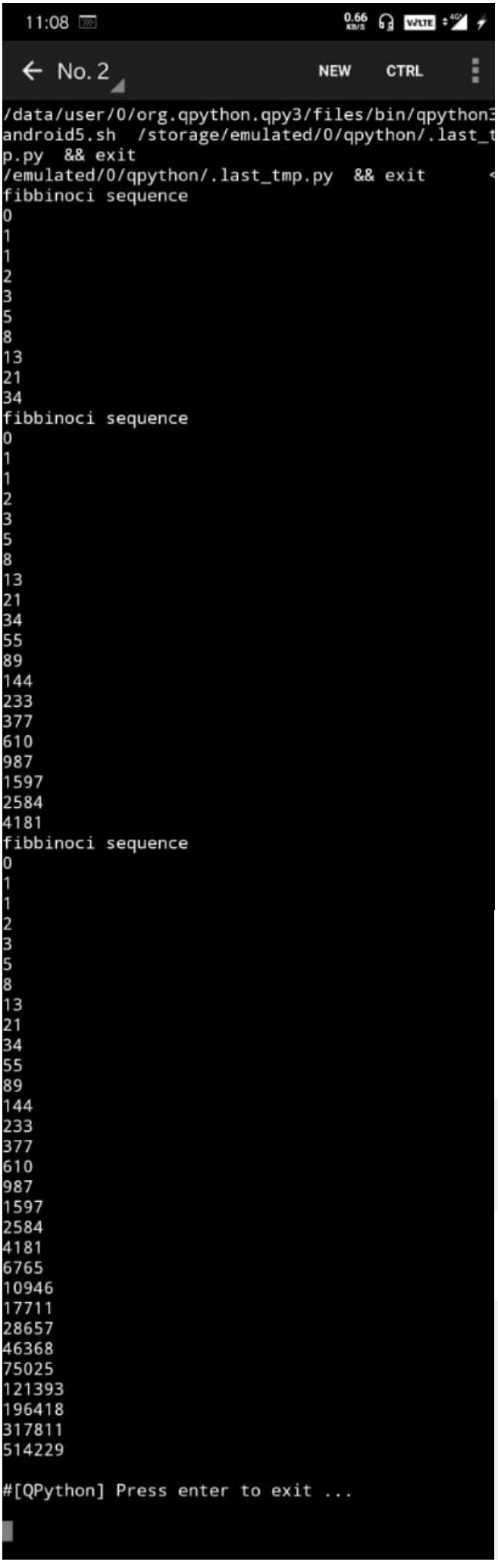

11:36
No. 1
NEW
CTRL
/data/user/0/org.qpython.qpy3/files/bin/qpython3-android5.sh /storage/emulated/0/qpython/.last_tmp.py && exit
/emulated/0/qpython/.last_tmp.py && exit
enter a number12
12
enter a number34
34
sum of two num 46
#[QPython] Press enter to exit ...


7:54
QEdit - fib.py *
n=int(input ("how many terms?"))
n1=0
n2=1
count=0
if n<=0:
print ("please enter a positive intege
elif n == 1:
print ("fibbinocci sequence upto",n,
print (n1)
else:
print("fibbinoci sequence")
while count<n:
print (n1)
x=n2
n2=n1+n2
n1=x
count +=1


8:12
No. 1
NEW
CTRL
/data/user/0/org.qpython.qpy3/files/bin/qpython3-android5.sh && exit
qpy3/files/bin/qpython3-android5.sh && exit
Python 3.6.6 (qpyc:3.6.6, Jul 26 2018, 03:54:22)
[BUILD WITH QPY3-TOOLCHAIN (https://github.com/qpython-android)] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> n,m=1,2
>>> n
1
>>> m
2
>>>
1 2 3 4 5 6 7 8 9 0
q w e r t y u i o p
a s d f g h j k l
z x c v b n m
?123


20:26
No. 14
NEW
CTRL
/data/user/11/org.qpython.qpy3/files/bin/qpython3-android5.sh /storage/emulated/11/qpython/.last_tmp.py && exit
ated/11/qpython/.last_tmp.py && exit
enter a number: 7
positive number
#[QPython] Press enter to exit ...
1 2 3 4 5 6 7 8 9 0
q w e r t y u i o p
a s d f g h j k l
z x c v b n m
?123


11:06
QEdit - fib.py *
def fibo(n):
n1,n2=0,1
count=0
if n<=0:
print ("please enter a positive intege
elif n == 1:
print ("fibbinocci sequence upto",n,
print (n1)
else:
print("fibbinoci sequence")
while count<n:
print (n1)
x=n2
n2=n1+n2
n1=x
count +=1
fibo(10)
fibo(20)
fibo(30)



Import NumPy

Once NumPy is installed, import it in your applications by adding the `import` keyword:

```
import numpy
```

Now Numpy is imported and ready to use.

Example

```
import numpy

arr = numpy.array([1, 2, 3, 4, 5])

print(arr)
```

1-D Arrays

An array that has 0-D arrays as its elements is called uni-dimensional or 1-D array.

These are the most common and basic arrays.

Example

Create a 1-D array containing the values 1,2,3,4,5:

```
import numpy as np

arr = np.array([1, 2, 3, 4, 5])

print(arr)
```

0-D Arrays

0-D arrays, or Scalars, are the elements in an array. Each value in an array is a 0-D array.

Example

Create a 0-D array with value 42

```
import numpy as np

arr = np.array(42)

print(arr)
```

Higher Dimensional Arrays

An array can have any number of dimensions.

When the array is created, you can define the number of dimensions by using the `ndmin` argument.

Example

Create an array with 5 dimensions and verify that it has 5 dimensions:

```
import numpy as np

arr = np.array([1, 2, 3, 4], ndmin=5)

print(arr)
print('number of dimensions :',
arr.ndim)
```

What is NumPy?

NumPy is a python library used for working with arrays.

It also has functions for working in domain of linear algebra, fourier transform, and matrices.

NumPy was created in 2005 by Travis Oliphant. It is an open source project and you can use it freely.

NumPy stands for Numerical Python.

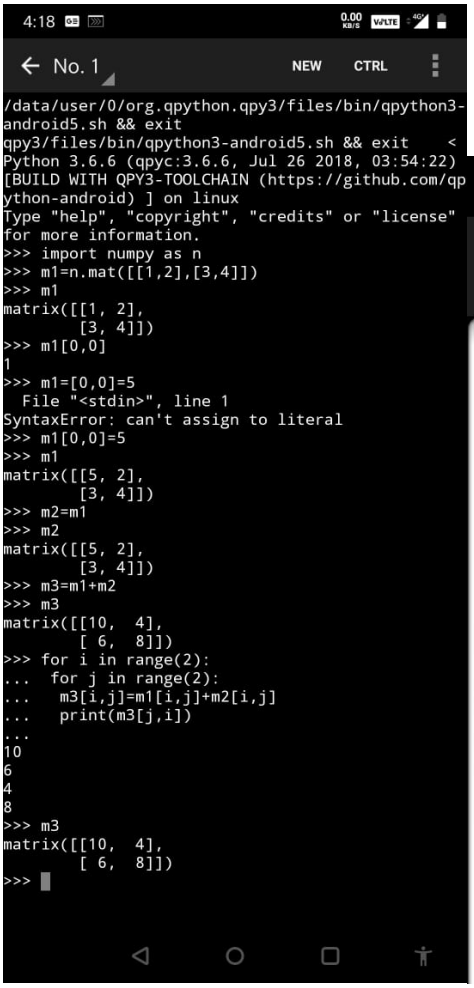
Why Use NumPy ?

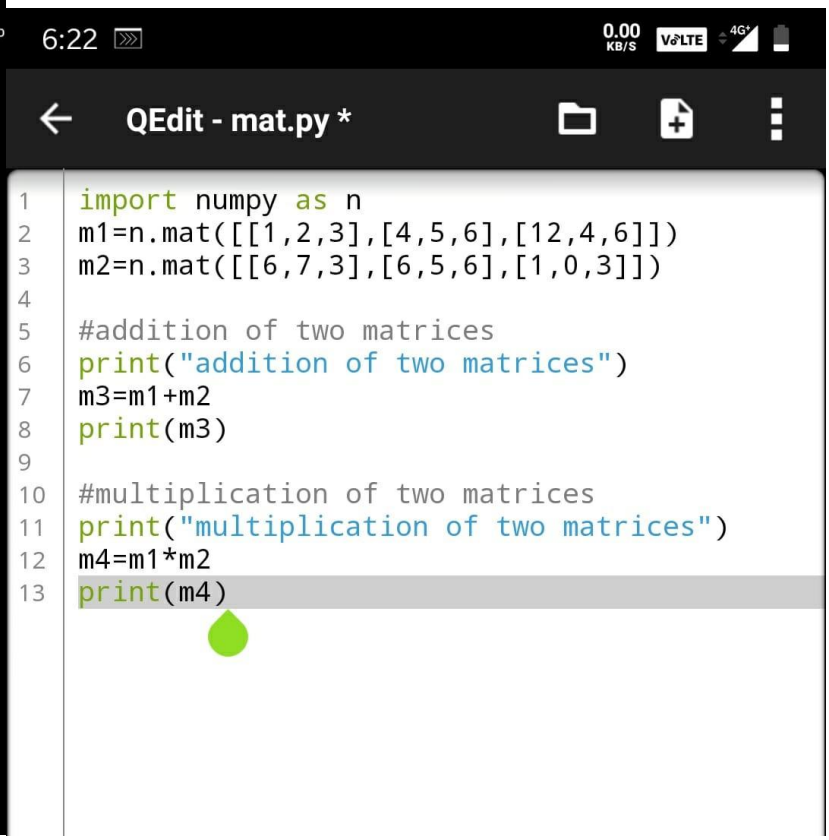
In Python we have lists that serve the purpose of arrays, but they are slow to process.

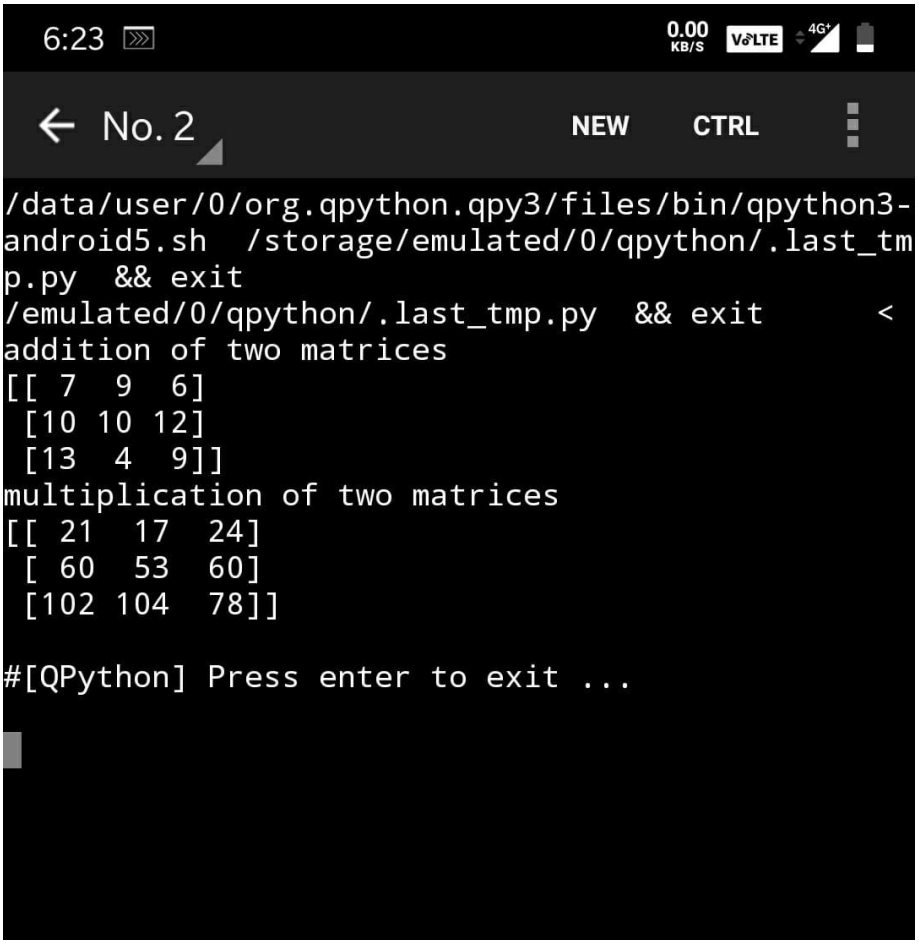
NumPy aims to provide an array object that is up to 50x faster that traditional Python lists.

The array object in NumPy is called `ndarray`, it provides a lot of supporting functions that make working with `ndarray` very easy.

Arrays are very frequently used in data science, where speed and resources are very important.


4:18
No. 1
NEW
CTRL
/data/user/0/org.qpython.qpy3/files/bin/qpython3-android5.sh && exit
qpy3/files/bin/qpython3-android5.sh && exit
Python 3.6.6 (qpyc:3.6.6, Jul 26 2018, 03:54:22)
[BUILD WITH QPY3-TOOLCHAIN (https://github.com/qpython-android)] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> import numpy as n
>>> m1=n.mat([[1,2],[3,4]])
>>> m1
matrix([[1, 2],
[3, 4]])
>>> m1[0,0]
1
>>> m1=[0,0]=5
File "<stdin>", line 1
SyntaxError: can't assign to literal
>>> m1[0,0]=5
>>> m1
matrix([[5, 2],
[3, 4]])
>>> m2=m1
>>> m2
matrix([[5, 2],
[3, 4]])
>>> m3=m1+m2
>>> m3
matrix([[10, 4],
[6, 8]])
>>> for i in range(2):
... for j in range(2):
... m3[i,j]=m1[i,j]+m2[i,j]
... print(m3[j,i])
...
10
6
4
8
>>> m3
matrix([[10, 4],
[6, 8]])
>>>


6:22
0.00 KB/S
QEdit - mat.py *
1 import numpy as n
2 m1=n.mat([[1,2,3],[4,5,6],[12,4,6]])
3 m2=n.mat([[6,7,3],[6,5,6],[1,0,3]])
4
5 #addition of two matrices
6 print("addition of two matrices")
7 m3=m1+m2
8 print(m3)
9
10 #multiplication of two matrices
11 print("multiplication of two matrices")
12 m4=m1*m2
13 print(m4)


6:23
0.00 KB/S
No. 2
NEW
CTRL
/data/user/0/org.qpython.qpy3/files/bin/qpython3-android5.sh /storage/emulated/0/qpython/.last_tmp.py && exit
/emulated/0/qpython/.last_tmp.py && exit
addition of two matrices
[[7 9 6]
[10 10 12]
[13 4 9]]
multiplication of two matrices
[[21 17 24]
[60 53 60]
[102 104 78]]
#[QPython] Press enter to exit ...

Assignment-1

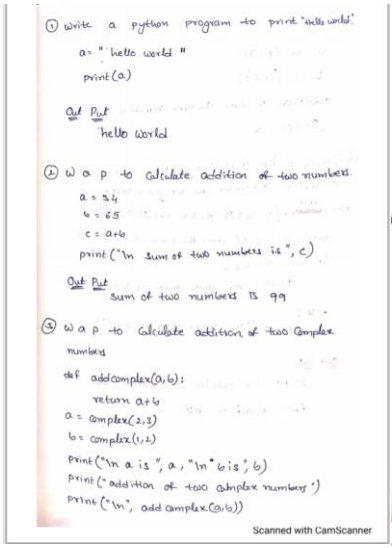
1. Write a python program to Print "Hello World".
2. W.a.p to calculate addition of two numbers?
3. W.a.p to calculate addition of two complex numbers?
4. Create a list of 10 integer values and perform a search operation for the given value.
5. Create a list of 10 numbers and convert into a list and append 5 more values to the list.
6. Find the maximum and minimum values of a given list.
7. Create a dictionary of 5 items and print all the items of the dictionary.
8. Apply Insert(), add(), update(), pop(), clear(), remove() methods on a list.
9. W.a.p to find roots of a quadratic equation $5x2 + 4x + 1 = 0$
10. Take two variables and use all operators between them. Ex, a+b…….. a<<b etc.

1. Write a program to find the biggest number among three given numbers using if syntax.
2. Print 1 to 100 numbers using while loop.
3. Print all even numbers between 1000 to 1.
4. Create a dictionary with 10 items and print all the items using for statement.
5. find out the sum of all elements in the tuple.
6. Take a string and convert it into upper case letters.
7. Print "hello world" 10 times using for syntax.
8. Take a list which holds 10 integers values. write a program to delete list elements whose values are greater than 10.
9. W.a.p to merge two strings.
10. Take a list of 20 numbers. And print all 20 numbers in ascending order.

Assignment -3

1. Create two matrices and perform addition and multiplication.
2. Create 3 Dimensional array with values and print them using numpy package.
3. Create one dimensional array of 10 integers and print 2 to 8 indexed values using slicing.
4. Create a list of 9 integers and make it into 3*3 matrix using reshape() method in NumPy.
5. Find y value
   $y=5m^2 + 8m -5$
   where m is a matrix of 3*3 order.

Assignment Done by student(sample)



① write a python program to print "hello world"

```
a= " hello world "
print(a)
```

Out Put

hello world

② w a p to calculate addition of two numbers

```
a = 34
b = 65
c = a+b
print ("In sum of two numbers is ", c)
```

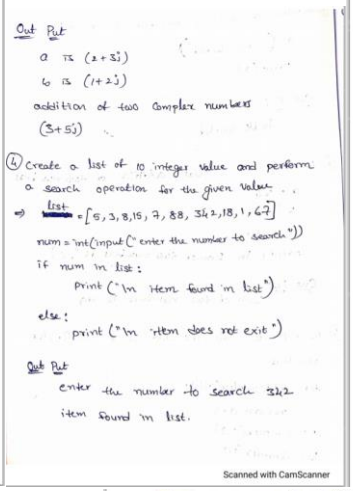
Out Put

sum of two numbers is 99

③ w a p to calculate addition of two Complex numbers

```
def addcomplex(a,b):
    return a+b
a = complex(2,3)
b = complex(1,2)
Print("In a is ", a, "In b is ", b)
Print("addition of two complex numbers")
Print("In", addcomplex(a,b))
```

Scanned with CamScanner



Out Put

a is (2+3j)
b is (1+2j)
addition of two complex numbers
(3+5j)

④ Create a list of 10 integer value and perform a search operation for the given value

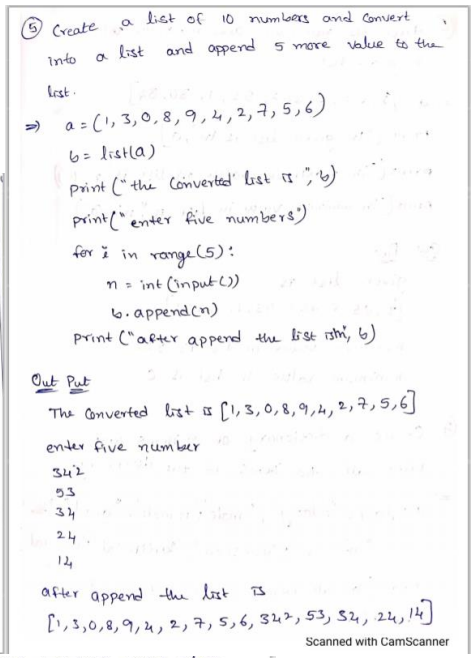
⇒ list = [5, 3, 8, 15, 7, 88, 342, 18, 1, 67]

```
num = int(input("enter the number to search"))
if num in list:
    Print("In item found in list")
else:
    print("In item does not exit")
```

Out Put

enter the number to search 342
item found in list.

Scanned with CamScanner



⑤ Create a list of 10 numbers and convert into a list and append 5 more value to the list

⇒

```
a = (1, 3, 0, 8, 9, 4, 2, 7, 5, 6)
b = list(a)
print("the converted list is ", b)
print("enter five numbers")
for i in range(5):
    n = int(input())
    b.append(n)
print("after append the list is", b)
```

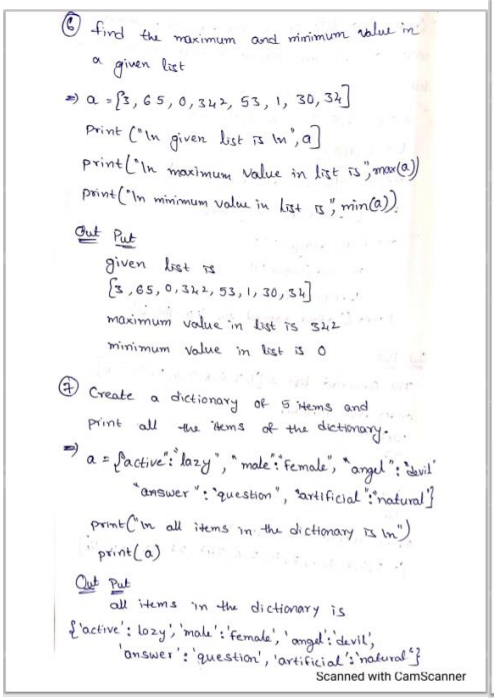
Out Put

The converted list is [1, 3, 0, 8, 9, 4, 2, 7, 5, 6]

enter five number
342
53
34
24
14

after append the list is
[1, 3, 0, 8, 9, 4, 2, 7, 5, 6, 342, 53, 34, 24, 14]

Scanned with CamScanner



⑥ find the maximum and minimum value in a given list

⇒

```
a = [3, 65, 0, 342, 53, 1, 30, 34]
Print("In given list is \n", a)
print("In maximum value in list is", max(a))
print("In minimum value in list is", min(a))
```

Out Put

given list is
[3, 65, 0, 342, 53, 1, 30, 34]
maximum value in list is 342
minimum value in list is 0

⑦ Create a dictionary of 5 items and print all the items of the dictionary.

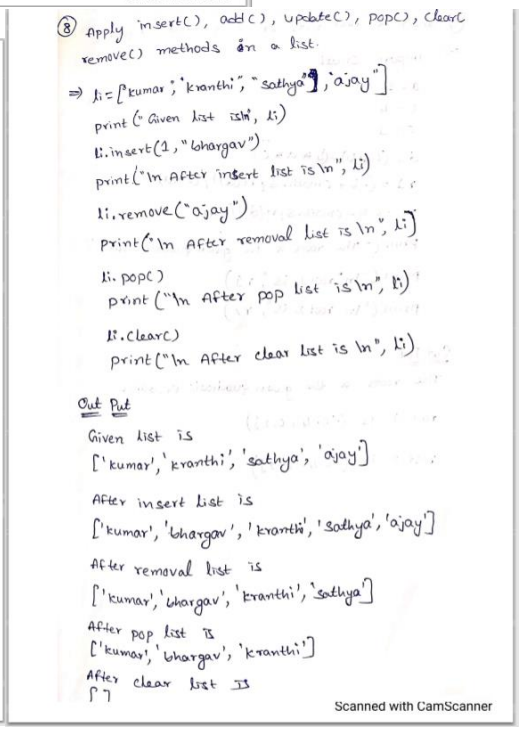
⇒

```
a = {"active": "lazy", "male": "Female", "angel": "devil"
     "answer": "question", "artificial": "natural"}
print("In all items in the dictionary is \n")
print(a)
```

Out Put

all items in the dictionary is
{'active': 'lazy', 'male': 'female', 'angel': 'devil',
'answer': 'question', 'artificial': 'natural'}

Scanned with CamScanner



⑧ Apply insert(), add(), update(), pop(), clear() remove() methods on a list

⇒

```
li = ["kumar", "kranthi", "sathya", "ajay"]
print("Given list is", li)
li.insert(1, "bhargav")
print("In After insert list is \n", li)
li.remove("ajay")
print("In After removal list is \n", li)
li.pop()
print("In After pop list is \n", li)
li.clear()
print("In After clear list is \n", li)
```

Out Put

Given list is
['kumar', 'kranthi', 'sathya', 'ajay']

After insert list is
['kumar', 'bhargav', 'kranthi', 'sathya', 'ajay']

After removal list is
['kumar', 'bhargav', 'kranthi', 'sathya']

After pop list is
['kumar', 'bhargav', 'kranthi']

After clear list is
[]

Scanned with CamScanner

Course Outcomes

The course is designed to provide an Introduction to Python programming language. The focus of the course is to provide students with an introduction to scripting programming language, basics and how-to handling packages using python programming language.

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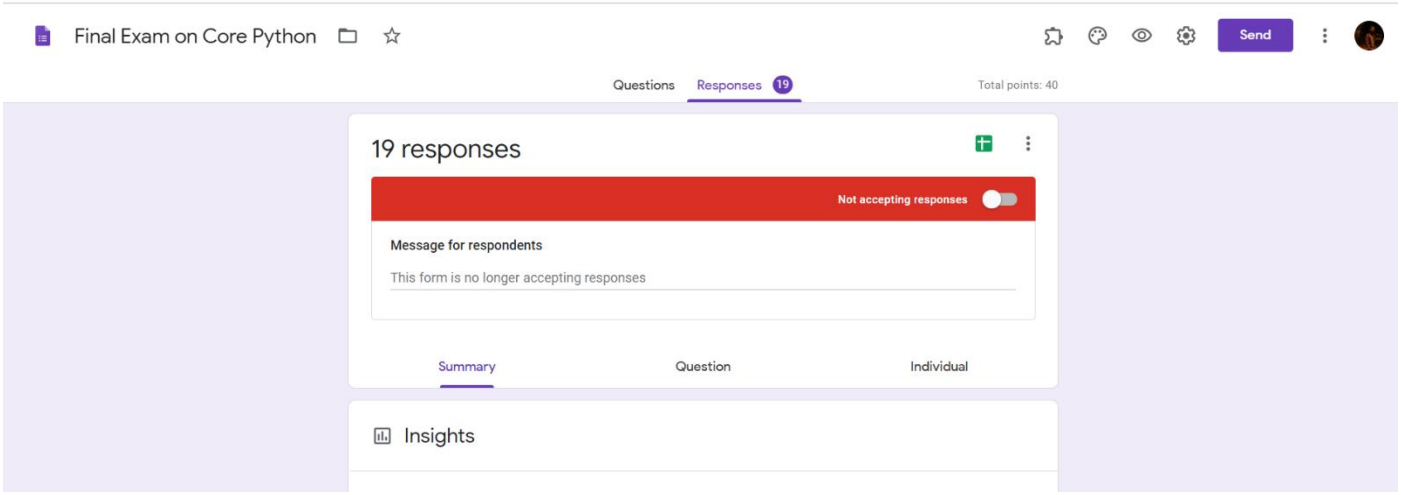
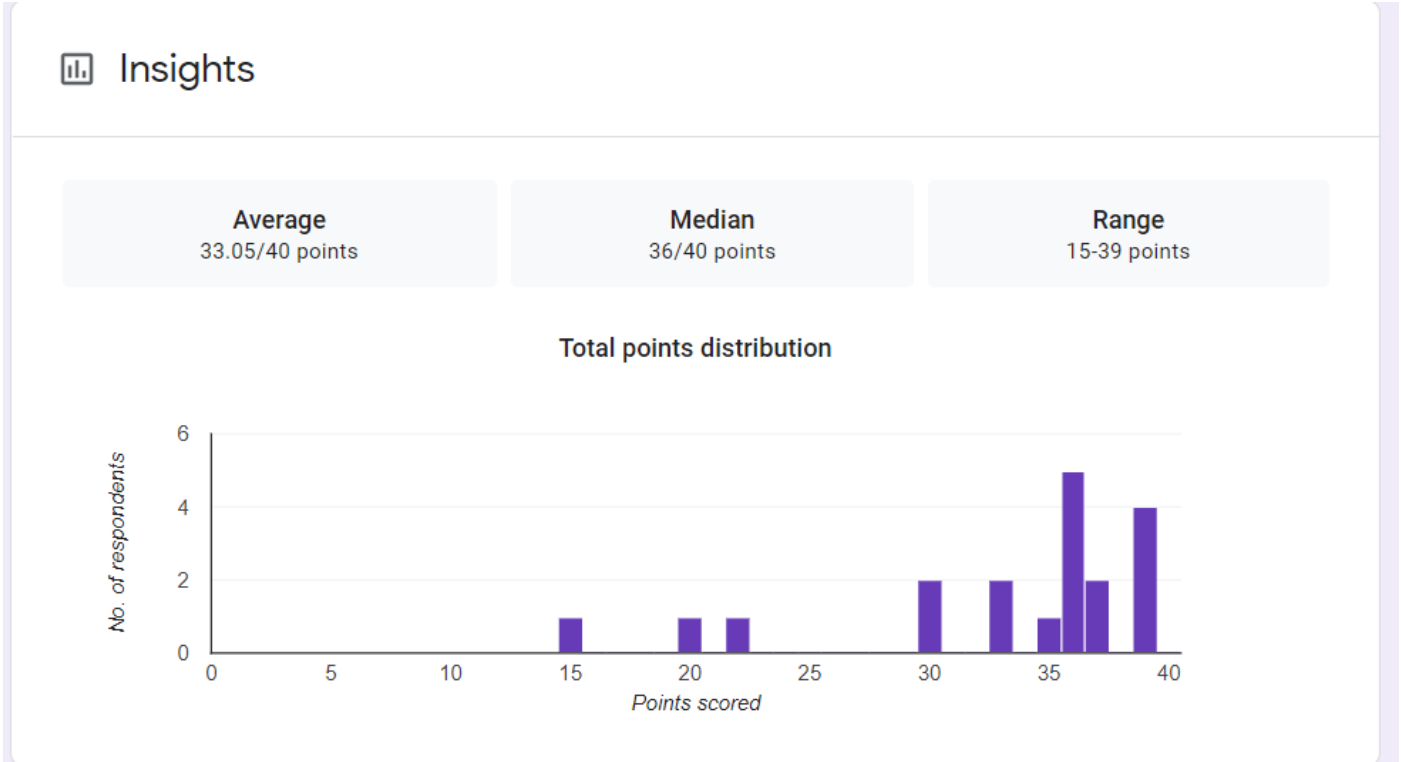
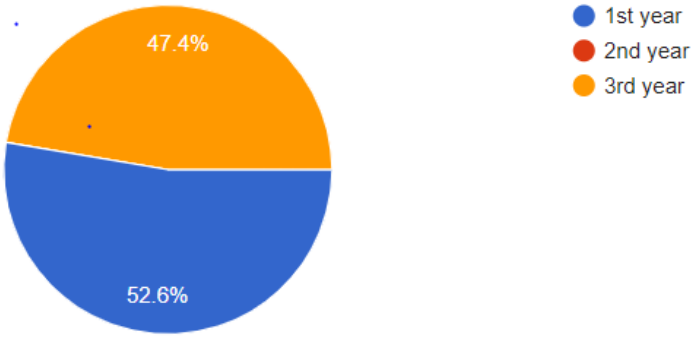
Course Final Exam





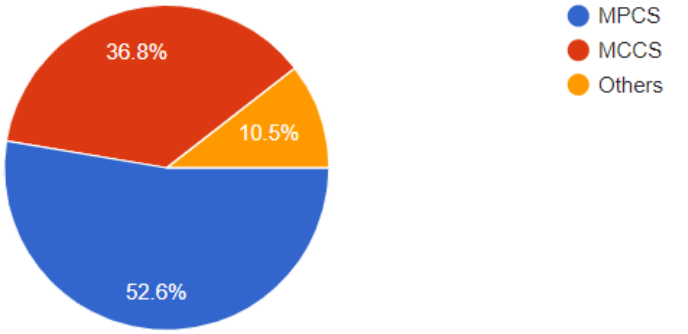
year of studying

19 responses



Branch

19 responses



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fx | Timestamp

	A	B	C	D	E	F	G	H	I	J	K
1	Timestamp	Score	External	Internal	percentage	Grade	Full Name	Hallticket Number	certificate no.	year of studying	Branch
2	14/05/2020 10:49:20	30 / 40	30	10	80	A-	Swapna	Y173072008	abrcs001	3rd year	MCCS
3	14/05/2020 10:54:19	36 / 40	36	10	92	A	Nagasai Dara	Y173072010	abrcs002	3rd year	MCCS
4	14/05/2020 10:47:22	36 / 40	36	10	92	A	J Shanmukha Sainadh	Y173072014	abrcs003	3rd year	MCCS
5	14/05/2020 10:53:39	33 / 40	33	10	86	A	Kandula Navya	Y173072016	abrcs004	3rd year	MCCS
6	14/05/2020 11:09:32	30 / 40	30	10	80	A-	V.V.S.Sukanya	Y173072040	abrcs005	3rd year	MCCS
7	14/05/2020 10:47:30	37 / 40	37	10	94	A	Allaparthisudharshan	Y173072046	abrcs006	3rd year	Others
8	14/05/2020 11:06:29	39 / 40	39	10	98	A	PASUPULETI BALANAG/	Y173072124	abrcs007	3rd year	MPCS
9	14/05/2020 10:25:14	15 / 40	15	10	50	C	Sanjay	Y177124356	abrcs008	3rd year	MPCS
10	14/05/2020 10:48:30	39 / 40	39	10	98	A	N kranthi kumar	Y193072043	abrcs009	1st year	MCCS
11	14/05/2020 10:44:11	39 / 40	39	10	98	A	V.Kumar	Y193072062	abrcs010	1st year	MCCS
12	14/05/2020 11:28:04	20 / 40	20	10	60	B	Chippala leelasai	Y193072106	abrcs011	1st year	MPCS
13	14/05/2020 10:28:17	22 / 40	22	10	64	B	Harika deevi	Y193072107	abrcs012	1st year	MPCS
14	14/05/2020 11:11:01	37 / 40	37	10	94	A	Kadavakollu gayatri	Y193072118	abrcs013	1st year	MPCS
15	14/05/2020 10:56:40	35 / 40	35	10	90	A	Nalluri Lakshmi	Y193072130	abrcs014	1st year	MPCS
16	14/05/2020 11:19:45	33 / 40	33	10	86	A	Parisa pavankalyan	Y193072132	abrcs015	1st year	MPCS
17	14/05/2020 10:54:33	36 / 40	36	10	92	A	Pathan Zilekha	Y193072133	abrcs016	1st year	MPCS
18	14/05/2020 10:59:51	39 / 40	39	10	98	A	Revathi priya Tiruveedhul	Y193072136	abrcs017	1st year	MPCS
19											
20											
21						Grade	percentage				
22						A	85 - 100%				
23						A-	80-85%				
24						B+	70 - 80%				
25						B	60- 70 %				
26						B-	55 - 60%				
27						C	50 - 55%				
28						F	0-49%				

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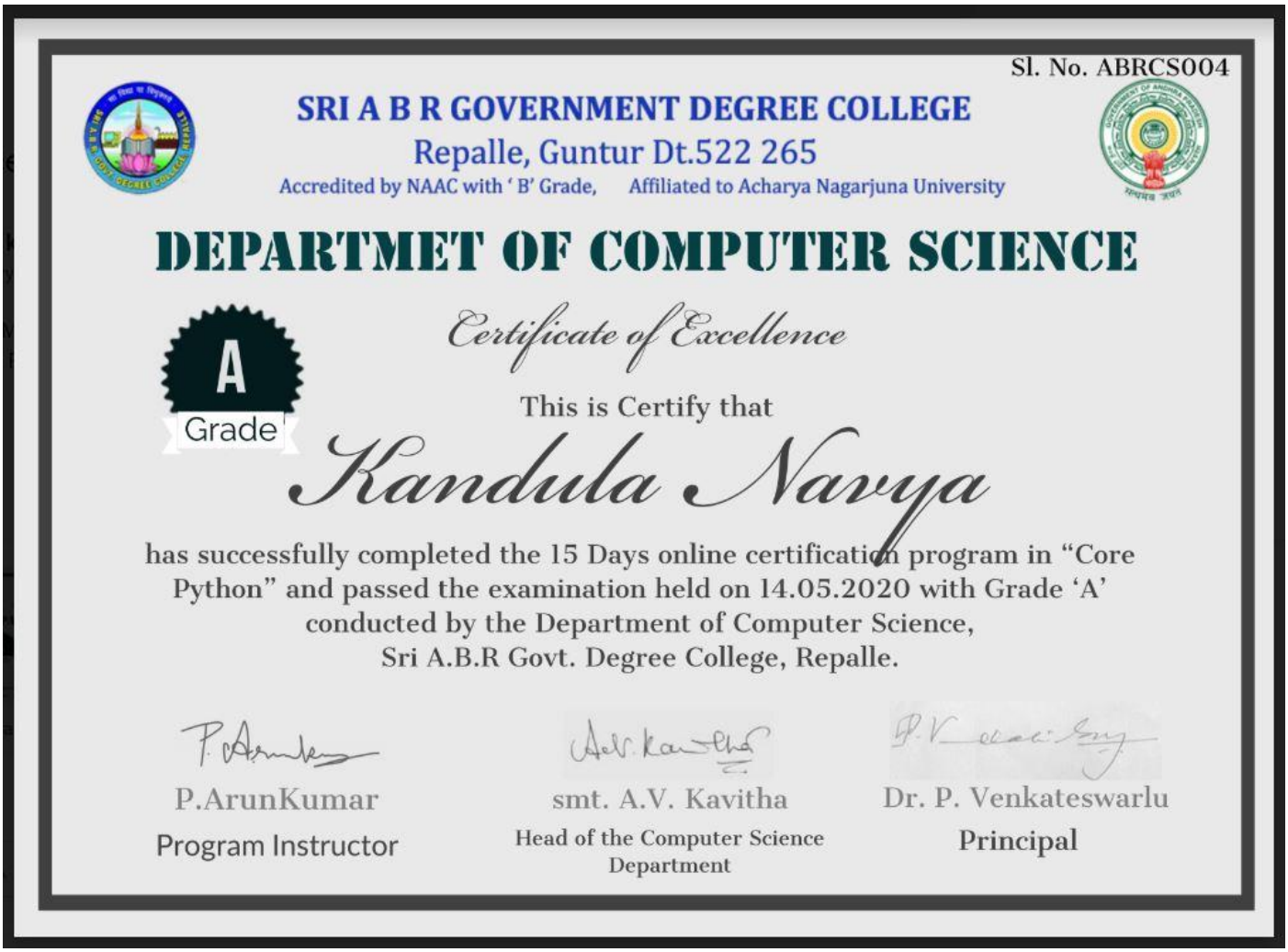
Sample Certificate



Sl. No. ABRCS004

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DEPARTMET OF COMPUTER SCIENCE

Certificate of Excellence

A Grade

This is Certify that

Kandula Navya

has successfully completed the 15 Days online certification program in "Core Python" and passed the examination held on 14.05.2020 with Grade 'A' conducted by the Department of Computer Science, Sri A.B.R Govt. Degree College, Repalle.

P.ArunKumar	smt. A.V. Kavitha	Dr. P. Venkateswarlu
Program Instructor	Head of the Computer Science Department	Principal