```
# 1st program (str)
x = 'MAHESH'
y = ' SHINDE'
c= x+y
print(c)
print(type(c))
```

```
MAHESH SHINDE
<class 'str'>
```

```
# 2nd program (str) string to take input from user and display output of it

name =  str

name = str(input("Enter Your Name "))

print("Your Name is",name)

print(type(name))
```

```
Enter Your Name MAHESH SHINDE
Your Name is MAHESH SHINDE
<class 'str'>
```

```
# 3rd program (int)
a = 12
b = 23
c = a*b
print(c)
print(type(c))
```

```
276
<class 'int'>
```

```
# 4th programme (int) integer type to take input from user and display output of it

roll = int
roll = int(input("Enter Your Roll No "))
print("Your Roll No iS",roll)

print(type(roll))
```

```
Enter Your Roll No 163
Your Roll No iS 163
<class 'int'>
```

```
# 5th (float)
a = 10.6
b = 5.5
c = a-b
```

```
print(c)
print(type(c))
```

```
5.1
```

```
# 6th program (float) to take string input from user and display their floating type

n = float
n = float(input("Enter the number to convert into floating type number "))
x = float(n)
print('Floating type number is',x)
print(type(x))
```

```
Enter the number to convert into floating type number 163
Floating type number is 163.0
<class 'float'>
```

```
# 7th (list)
list1 = [1,2,3,4,'Hii']
list1.append('Mahesh')
list1.remove('Hii')
print(list1)
print(len(list1)) # length of the list
print(type(list1))
```

```
[1, 2, 3, 4, 'Mahesh']
5
<class 'list'>
```

```
# 8th
list2 = ["FYCM", "SYCM", "TYCM"]
print(list2[1]) # for printing the element which position is 1
print(list2[2]) # for printing the element which position is 2
print(type(list2))
```

```
SYCM
TYCM
<class 'list'>
```

```
# 9th programme (tuple) use index to print the possition of element
tuple1 = (20,10,30,40,60,50,80,70)
x = tuple1.index(60) # index is searches the tuple value and returns the position of there
print(x)
```

```
4
```

```
# 10th programme (tuple) using count() function displaying the value we will take and this

tuple2 = (11,22,33,44,55,66,44,88,99,44,88,33,77)
x = tuple2.count(44) # count returns the number of times a value which occur inside the tu
print(x)
```

```
3
```

```
# 11th (range)
a = range(20)
for n in a:
  print(n)
```

```
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
```

```
# 12th programme(range). We using range(len(list)) for printing elements and there possiti

list = ["SQL","Python","C","C++","HTML","PHP","Ruby","JAVA"]

for index in range(len(list)): # to print the all elements in the list and there possition

  print(f"At possition {index}, we have {list[index]}")
```

```
At possition 0, we have SQL
At possition 1, we have Python
At possition 2, we have C
At possition 3, we have C++
At possition 4, we have HTML
At possition 5, we have PHP
At possition 6, we have Ruby
At possition 7, we have JAVA
```

```
# 13th programme(dict).We can use dict()function to print "name,age,district,state,country

a = dict(name = "John", age = 36, district ="Nashik", state ="Maharashtra", country = "Nor
print(a)
print(type(a))
```

```
{'name': 'John', 'age': 36, 'district': 'Nashik', 'state': 'Maharashtra', 'country':
<class 'dict'>
```

```
# 14th programme (dict).To create numbers dictionary.

my_dict = dict(a=1,b=2,c=3,d=4,e=5)
print(my_dict)
print(type(my_dict))
```

```
{'a': 1, 'b': 2, 'c': 3, 'd': 4, 'e': 5}
<class 'dict'>
```

```
# 15th programme (set).

set1 = {13,"Hello", 4,2,1, 3.14}
print(set1)
print(type(set1))
```

```
{1, 2, 3.14, 4, 13, 'Hello'}
<class 'set'>
```

```
# 16th programme (set) print days vertically using for loop.

days = {"Sunday", "Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday"}
print("looping through set elements... ")
for n in days:
    print(n)
print(type(days))
```

```
looping through set elements...
Tuesday
Monday
Sunday
Saturday
Friday
Wednesday
Thursday
<class 'set'>
```

```
# 17th programme using bool()

str = ''  # empty string
print(str,'   Is',bool(str))
str = 'Hello'
print(str,'is',bool(str))
```

```
    Is False
Hello is True
```

```
# 18th programme using bool()

a = None
print(a,'is',bool(a))

b = True
```

```
print(b,'is',bool(bytes))

c = 'Easy string'
print(c,'is',bool(c))
```

```
None is False
True is True
Easy string is True
```

```
#Q.no:2) Define a list containing first 20 numbers and print Even or Odd numbers from it.

list1 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10 ,11 ,12 ,13 ,14 ,15 ,16 ,17 ,18 ,19 ,20]
for n in list1:
   if n % 2==0:
     print(n, end=", ") # printing even numbers
```

```
2, 4, 6, 8, 10, 12, 14, 16, 18, 20,
```

```
#Q.no:3) From a word 'MAHARASHTRA',replace 'a' with 'x' and print the result, You have to

state = "Maharashtra"
print(state.replace("a", "x")) #removing 'a' to 'x' using replace().
```

```
Mxhxrxshtrx
```

```
#Q.no:4) Find sum of values in the following dictionary
#        input:{'a':100, 'b':200, 'c':300}
#        output :600.


def returnSum(myDict):
    list = []
    for i in myDict:
        list.append(myDict[i])
    final = sum(list)

    return final

dict = {'a': 100, 'b': 200, 'c': 300}
print("Sum :", returnSum(dict))
```

```
Sum : 600
```

```
#Q.no:5) Find a factorial of a number using what we have learned in this week.

num = int(input("Enter a number: "))
factorial = 1
if num < 0:
   print("  Negative number is not allow...")
elif num == 0:
```

```
elif num == 0:
   print("The factorial of 0 is 1")
else:
   for i in range(1,num + 1):
       factorial = factorial*i
   print("The factorial of",num,"is",factorial)
```

```
Enter a number: 12
The factorial of 12 is 479001600
```

✓ 10s completed at 1:50 PM