Assignment 3

1) Reverse the following tuple.
aTup = (10, 20, 30, 40, 50)

Ans:

```
aTup = (10, 20, 30, 40, 50)
aTup = aTup[ : : -1]
print (aTup)
```

2) Write a Python program to create a list of tuple with the first element as the number and second element as the square of the number.

Ans:

```
Obj = [(1, 2, 3, 4), (1, 4, 9, 16)]
print (Obj)
```

3) Write a Python program to create a tuple with numbers and print one item.

Ans:

```
Obj = (1, 2, 3, 4)
print (Obj[0])
```

4) Write a Python program to unpack a tuple in several variables.

Ans:

```
stu_bio = ("Pranil", 4101, 'SYBCA', "3 Years")
stu_name = stu_bio[0]
stu_roll_no = stu_bio[1]
stu_class = stu_bio[2]
stu_course_time = stu_bio[3]
```

5) Write a Python program to add an item in a tuple.

```
aTup = (1)
aTup = aTup + (2,3)
print (aTup)
```

⑥ Copy element 44 & 55 from the following tuple into a new tuple.

tuple1 = (11, 22, 33, 44, 55, 66)

Ans

```
tuple1 = (11, 22, 33, 44, 55, 66)
newtuple = tuple1[3:5]
print(newtuple)
```

⑦ Write a Python program to convert a tuple to a string.

Ans:-

```
tuple = ("abc", "Me", "You")
str = ''.join(tuple)
print(str)
```

⑧ Sort the tuple

Tuple = (2,4,6,8,1,4,7,8,2,7)

Ans:-

```
Tuple = (2,4,6,1,4,7,8,2,7)
Tuple = sorted(Tuple)
print(Tuple)
```

⑨ Write a Python program to get the 5th element from front & 5th element from last of a tuple.

```
Tuple = (1,2,3,4,5,6,7)
print(Tuple[4])
print(Tuple[-5])
```

⑩ Write a Python program to find the repeated items of a tuple:

```
Tuple = (1,2,4,4,2,0,8)
list = []

for i in Tuple:
    if Tuple.count(i) > 1 & i not in list:
        list.append(i)

print(i)
```

⑪ Write a Python program to check whether an element exists within a tuple.

```
Tuple = (1,2,3,4,5)
element = input("Enter the element:")
if
if Tuple.count(element) > 0:
    print("Yes it present")
else:
    print("No it's Not present")
```

Assignment No: 8

② What are application of void data type in

Ans:-

Assignment 4

① What is the output of following program:

```
sets = (1,2,3,4,4)
print(sets)
```

Ans:- 1, 2, 3, 4, 4.

② WPP to remove and return an arbitrary set element. Raise KeyError if the set is empty.

Ans:-

③ WPP to do iteration over sets.

Ans:-

```
set = {1,2,3,4,5}

for i in set:
    print(i)
```

④ WPP to add and remove operation in set.

Ans:-

```
set = {1,2}
set.add(3)
set.remove(1)
print(set)
```

⑤ Write a Python program to accept the strings which contains all vowels.

Ans:-

```
str = input("Enter a string")

if str.find("a")!=-1 and str.find("e")!=-1 and
str.find("i")!=-1 and str.find("o")!=-1 and
str.find("u")!=-1 :
    print("All vowel present")
else :
    print("Not All vowel present")
    str = ""
```

⑥ Write PP to create a union of sets.

Ans:-

```
set1 = {1,2}
set2 = {2,3}
set3 = set1 | set2
print(set3)
```

⑦ WPP to create an ~~insert~~ intersection of sets.

Ans:-

```
set1 = {1,2}
set2 = {2,3}
set3 = set1 & set2
print(set3)
```

⑧ WPP to find maximum and the minimum value in a set.

Ans:-

```
set = {"A","E","O","U","I"}
print(max(set)
print(min(set)
```

Assignment No: 8

⑨ What are application of void data type

Ans:-

(9) WPP to create set difference of a Symmetric difference.

Ans:-

```
set1 = {1, 2, 3, 4}
set2 = {3, 4, 5, 6}
# difference for set1 in set2
set3 = set1 - set2
print(set3)
# ~ — . for set1 in set2
set4 = set1 ^ set2
print(set4)
```

(10) WPP to find the length of a set.

Ans:-

```
set1 = {1, 2, 3}
print(len(set1))
```

(11) WPP to perform different set operations.

Ans:-

```
set1 = {1, 2, 3, 4, 5}
set2 = {4, 5, 6, 7, 8}

print(set1 | set2)
print(set1 &
print(set1 -
print(set1 ^
print(set1.issubset(set2))
print(set2.issuperset(set1))
```

(12) WPP to create a shallow copy of sets.

Ans:-

```
set = {1, 2, 3}
set2 = set.copy()
print(set2).
```

Assignment No: 8

(2) What are application of void data type

Ans:-