

## Lab 6

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**CO1: To write, test, and debug simple Python programs**

**CO2: To implement Python programs with conditional, loops and functions**

**Task 1:- Accessing The Member of Insider List**

**Python Code:**

```
tup1 = (1,3,'5',[6,'7',8,True],8)
print(tup1[3][1])
```

**Output:**

```
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -5> d:;
b -5'; & 'D:\python.exe' 'c:\Users\abc\.vscode\extensions\ms-python.pytho
y\launcher' '50232' '--' 'D:\Aryan\Semester - 3\Programming With Python\
7
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -5>
```

**Task 2:- Performing The Operation On Dictionary.**

**Python Code:**

```
dic1 = {'A': 65,'B': {'A': 35 , 'B': 54} , 'C': 67}
print(dic1['A'])
print(dic1['B']['B'])
fruit = {'Apple':20,'Mango' : 23}
fruit1 = {'Grapes' :25 , 'Banana' : 35}
mix = fruit.update(fruit1)
print(fruit)
fruit.pop('Banana')
print(fruit)
```

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**Output:**

```
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -5> d:;
b -5'; & 'D:\python.exe' 'c:\Users\abc\.vscode\extensions\ms-python.pytho
y\launcher' '50394' '--' 'D:\Aryan\Semester - 3\Programming With Python\
65
54
{'Apple': 20, 'Mango': 23, 'Grpares': 25, 'Banana': 35}
{'Apple': 20, 'Mango': 23, 'Grpares': 25}
18
11
15
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -5>
```

**Task 3:- Performing The Operation On Sets.****Python Code:**

```
set1 = {1,1,3,"4",5,6}
print(set1)
s1 = {1,2,3,4,5,6}
s2 = {1,2,4,6,7,9}
print(s1.union(s2))
print(s1.intersection(s2))
```

**Output:**

```
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -5> d:;
b -5'; & 'D:\python.exe' 'c:\Users\abc\.vscode\extensions\ms-python.pytho
y\launcher' '50423' '--' 'D:\Aryan\Semester - 3\Programming With Python\
{1, 3, 5, 6, '4'}
{1, 2, 3, 4, 5, 6, 7, 9}
{1, 2, 4, 6}
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -5>
```

**Task 4:- Implementing Different Types of Number System.****Python Code:**

```
print(0x12)
print(0o13)
print(0b1111)
```

**Output:**

```
18
11
15
```

---

**Task 5:- Arithmetic Operators****Python Code:**

```
X = 5
Y = 2
print(X + Y)
print(X - Y)
print(X*Y)
print(X / Y)
print(X//Y)
print(X%Y)
print(X**Y)
```

**Output:**

```
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -5> & 'D:\python.exe'
-2023.14.0\pythonFiles\lib\python\debugpy\adapter/../../debugpy\launcher' '50212' '--'
b Manual\Lab -5\31-07-2023 LAB-6.py'
7
3
10
2.5
2
1
25
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -5>
```

**Task 6:- Logical Operators****Python Code:**

```
X = 56
Y = 43
print(X > 50 and Y < 50)
print(X > 50 or Y > 50)
print(not(X < 50))
```

**Output**

```
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -5> d.;
b -5'; & 'D:\python.exe' 'c:\Users\abc\.vscode\extensions\ms-python.pytho
y\launcher' '50273' '--' 'D:\Aryan\Semester - 3\Programming With Python\
True
True
True
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -5>
```

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**Task 7:- Identity Operator****Python Code:**

```
A = [1,2,3]
B = [1,2,3]
C = A
print(A is B)
print(A is C)
```

**Output:**

```
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -5> d;
b -5'; & 'D:\python.exe' 'c:\Users\abc\.vscode\extensions\ms-python.pytho
y\launcher' '50348' '--' 'D:\Aryan\Semester - 3\Programming With Python\L
False
True
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -5>
```

**Task 8:- Member Operator****Python Code:**

```
A = 2
B = [1,2,3]
print(A in B)
print(A not in B)
```

**Output:**

```
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -5> d;
b -5'; & 'D:\python.exe' 'c:\Users\abc\.vscode\extensions\ms-python.pytho
y\launcher' '50374' '--' 'D:\Aryan\Semester - 3\Programming With Python\L
True
False
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -5>
```

**Task 9:- Conditional Statement****Python Code:**

```
A = 3
if A < 3 :
    print(f'{A} Is Greater Than 5')
else :
    print(f'{A} Is Less Than 5')
B = 15
if B > 10 :
    print("%d Is Greater Than 10" % B)
elif B > 5 :
    print("%d Is Greater Than 5" % B)
```

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```
else :  
    print("%d Is Not Greater Than 5"% B)
```

**Output:**

```
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -6> d:;  
b -6'; & 'D:\python.exe' 'c:\Users\abc\.vscode\extensions\ms-python.pytho  
y\launcher' '50248' '--' 'D:\Aryan\Semester - 3\Programming With Python\L  
3 Is Less Than 5  
15 Is Greater Than 10  
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -6>
```

## Post Lab

**Task 1****Python Code:**

```
tup3 = ("A", "R", "Y","A","N")  
print("".join(tup3))
```

**Output:**

```
d:; cd 'd:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -6';  
python-2023.14.0\pythonFiles\lib\python\debugpy\adapter/../../debugpy\laun  
hon\Lab Manual\Lab -6\31-07-2023 LAB-6.py'  
ARYAN  
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -6>
```

**Task 2****Python Code:**

```
tuple1 = (11,22)  
tuple2 = (99,88)  
tuple3 = tuple1  
tuple1 = tuple2  
tuple2 = tuple3  
print(tuple1)  
print(tuple2)
```

**Output:**

```
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -6> d:; cd  
b -6'; & 'D:\python.exe' 'c:\Users\abc\.vscode\extensions\ms-python.pytho  
y\launcher' '50329' '--' 'D:\Aryan\Semester - 3\Programming With Python\Lab  
(99, 88)  
(11, 22)  
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -6>
```

**Task 3****Python Code:**

```
tuple3 = ("Orange" , [10,20,30],(5,15,25))  
print(tuple3[1][1])
```

**Output:**

```
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -6> d:;  
b -6'; & 'D:\python.exe' 'c:\Users\abc\.vscode\extensions\ms-python.pytho  
y\launcher' '50362' '--' 'D:\Aryan\Semester - 3\Programming With Python\L  
20
```

**Task 4****Python Code:**

```
tuple4 = (11,[22,33],44,55)  
tuple4[1][0] = 222  
print(tuple4)
```

**Output:**

```
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -6> d:;  
b -6'; & 'D:\python.exe' 'c:\Users\abc\.vscode\extensions\ms-python.pytho  
y\launcher' '50379' '--' 'D:\Aryan\Semester - 3\Programming With Python\L  
(11, [222, 33], 44, 55)  
PS D:\Aryan\Semester - 3\Programming With Python\Lab Manual\Lab -6>
```

**Task 5****Python Code:**

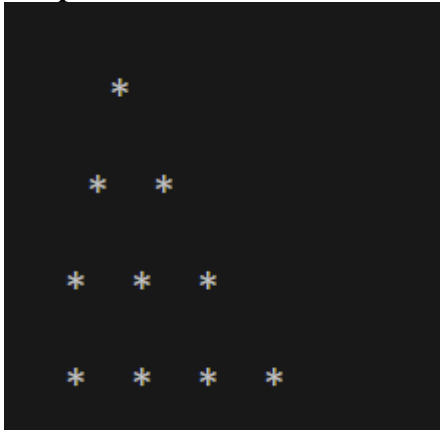
```
for i in range(1, 11):  
    print(10, " ", i, " ", i * 10)
```

**Output:**

```
b -6'; & 'D:\python.exe' 'c:\Users\abc\  
y\launcher' '50405' '--' 'D:\Aryan\Seme  
10 1 10  
10 2 20  
10 3 30  
10 4 40  
10 5 50  
10 6 60  
10 7 70  
10 8 80  
10 9 90  
10 10 100
```

**Task 6****Python Code:**

```
for i in range(1,6):  
    for j in range(1, 5-i):  
        print(" ",end="")  
    for j in range(1,i):  
        print(" * ",end="")  
    print("\n")
```

**Output:**

```
  *  
  
 *  *  
  
*  *  *  
  
*  *  *  *
```