SIKSHA 'O' ANUSANDHAN
DEEMED TO BE UNIVERSITY

Admission Batch: **Session:**

Laboratory Record

Programming in Python (CSE 3142)

Submitted by

Name: _Saswat Mohanty_

Registration No.: _1941012407_

Branch: _Computer Science and Engineering_

Semester: _5th_   Section: _'D'_

Department of Computer Science & Engineering

Faculty of Engineering & Technology (ITER)
Jagamohan Nagar, Jagamara, Bhubaneswar, Odisha - 751030

INDEX

Minor Assignment -5

Scope

Q1) study the program segments given below. Give the output produced, if any.

```
globalVar = 10
def test():
    localVar = 20
    print('Inside function test: globalVar = ', globalVar)
    print('Inside function test: localVar = ', localVar)
    test()
print('outside function test: globalVar = ', globalVar)
print('outside function test: localVar = ', localVar)
```

Program :-

```
globalVar = 10
def test():
    localVar = 20
    print('Inside function test: globalVar = ', globalVar)
    print('Inside function test: localVar = ', localVar)
test()
print('outside function test: globalVar = ', globalVar)
print('outside function test: localVar = ', localVar)
```

output :

Inside function test: globalVar = 10
Inside function test: localVar = 20
Outside function test: globalVar = 10
Exception has occured: NameError
name 'localVar' is not defined

Q2) Study the program segments given below. Give the output produced, if any.

```
globalVar = 10
def test():
    localVar = 20
    globalVar = 30
    print('Inside function test: globalVar = ', globalVar)
    print('Inside function test: localVar = ', localVar)
test()
print('outside function test: globalVar = ', globalVar
```

Program :-

```
globalVar = 10
def test():
    localVar = 20
    globalVar = 30
    print('Inside function test: globalVar = ', globalVar)
    print('Inside function test: localVar = ', localVar)
test()
print('outside function test: globalVar = ', globalVar)
```

output :-

```
Inside function test: globalVar = 30
Inside function test: localVar = 20
outside function test: globalVar = 10.
```

Q3) Study the program segments given below. Give the output produced, if any.

```
globalVar = 10
def test():
    global globalVar
    localVar = 20
    globalVar = 30
    print('Inside function test: globalVar = ', globalVar)
    print('Inside function test: localVar = ', localVar)
```

```
    test()
    print('outside function test: globalVar = ', globalVar)
```

Program :-

```
globalVar = 10
def test():
    global globalVar
    localVar = 20
    globalVar = 30
    print('inside function test: globalVar = ', globalVar)
    print('inside function test: localVar = ', localVar)
test()
print('outside function test: globalVar = ', globalVar)
```

Output :-

```
Inside function test: globalVar = 30
Inside function test: localVar = 20
Outside function test: globalVar = 30
```

Q4) study the program segments below. Give the output produced, if any.

```
def test1():
    test1.a = 10
    def test2():
        test1.a = 8
        print('inside function test2: ', test1.a)
    test2()
    print('outside function test2: ', test1.a
test1()
```

Program :-

```
def test1():
    test1.a = 10
    def test2():
```

```
        test1.a = 8
        print ('Inside function test2: ', test1.a)
    test2()
    print ('Outside function test 2: ', test1.a)
test1()
```

Output :-

Inside function test2 : 8
Outside function test 2 : 8

25) Study the program segments given below. Give the output produced if any.

```
    a = 4
    def f():
        a = 5
        def g():
            nonlocal a
            a = 10
            print ('inside function g, ', 'a = ', a)
            def h():
                nonlocal a
                a = 20
                print ('inside function h, ', 'a = ', a)
            h()
        g()
        print ('inside function f, ', 'a = ', a)
    f()
```

Program :

```
a = 4
def f():
    a = 5
    def g():
        nonlocal a
```

Scanned with CamScanner

```
    a = 10
    print ('inside function g,', 'a=', a)
    def h():
        nonlocal a
        a = 20
        print (' inside function h,', 'a=', a)
    h()
  g()
  print ('inside function f,', 'a=', a)
f()
```

Output:-

inside function g, a = 10
inside function h, a = 20
inside function f, a = 20

Q6) study the program segments given below. Give the output produced, if any.

```
x = 2
def test():
    x = x + 1
    print (x)
print (x)
```

Program :-

```
x = 2
def test():
    x = x + 1
    print (x)
print (x)
```

Output : -

2

07) Study the program segments given below. Give the output produced if any.

```
x = 2
def test():
    global x
    x = x+1
    print(x)
print(x)
```

Program:-

```
x = 2
def test():
    global x
    x = x+1
    print(x)
print(x)
```

Output:-

2