ASSIGNMENT-5

Q1) 8) Study the program segments given below. Give the output produced, if any.

```
global vare = 10
def test():
        local vare = 20
        print('Inside function test: global vare =', globalvare)
        print('Inside function test: localvare=', localvare)
test()
print('outside function test: globalvare =', global vare)
print('outside function test: local vare =', local vare)
```

→ Inside function test: global vare = 10
  Inside function test: local vare = 20
  outside function test: global vare = 10
  Errecure: ('localvare is not defined')

ii)
```
global vare = 10
def test():
        localvare = 20
        globalvare = 30
        print('Inside function test: globalvare =', globalvare)
        print('Inside function test: localvare =', localvare)
test()
print('outside function test: globalvare =', globalvare)
```

→ Inside function test: globalvare = 30
  Inside function test: localvare = 20
  outside function test: globalvare = 10

iii)
```
globalvare = 10
def test():
        global globalvare
        localvare = 20
        globalVare = 30
```

```
print ('Inside     function test: globalvare =', globalvare)
print ('Inside     function test: localvare =', localvare)
test()
print (' outside  function test: globalvare', globalvare)
```

→ Inside function test : global vare = 30
  Inside function test : localvare = 20
  Outside function test: globalvare = 30

iv)
```
def test1():
        test1.a = 0
        def test2():
                test1.a = 8
                print ('Inside function test 2:', test1.a)
        test2()
        print ('outside function test2', test1.a)
    test1()
```

→ 8
  8

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

→ Inside function g, a=10
Inside function h, a=20
Inside function f, a=20

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

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