GRAND REVIEW ON CORE PYTHON

1 Output of the following script

```
pylist=[1,2,3,4,[5,6,7,8,[9,10,11,12,[13,14,15,16]]]]
print(pylist)
print(pylist[4][4][4][3])
```

2 Output of the following script

```
r = lambda q: q * 2; s = lambda q: q * 3
x = 3; x = r(x);x = s(x);x = r(x)
print (x,x)
```

3. Output of the following script

```
var1 = 'Hello NareshIT!'
var2 = "NareshITHYD"
print("var1[0]: ", var1[0])
print("var2[1:5]: ", var2[1:5])
```

4 What is the value of this expression: bin(10-2)+bin(12^4)
5 What is the output of print(['hello', 'morning'][bool(True)])
6 Count the Number of Vowels in a String
7 Calculate the Number of Digits and Letters in a String
8 Check a Number is a Prime Number or Not

9 Output of the following

```
for i in range(10):
    if i == 5:
        break
    else:
        print(i)
else:
    print("Here")
```

10 Output of the statement is: print('my_string'.isidentifier())
11 What is the output of the code shown below?

```
l=[2, 3, [4, 5]]
l2=l.copy()
l2[0]=88
print(l)
print(l2)
```

12 What is the output of the following code?

```
l1=[10, 20, 30]
l2=[-10, -20, -30]
l3=[x+y for x, y in zip(l1, l2)]
print(l3)
```

13 What is the output of the code shown below?

```
l1=[1,2,3]
l2=[4,5,6]
l3=[7,8,9]
for x, y, z in zip(l1, l2, l3):
        print(x, y, z)
```

14 What is the output of the code shown below?

```
a={}
print(a.fromkeys([1,2,3],"check"))
```

15 What is the output of the following code?

```
a={1,2,3}
b=a.add(4)
print(b)
```

16 What is the output of the following piece of code?

```
a=(2,3,1,5);a.sort();print(a)
```

17 What is the output of the following piece of code?

```
a=list((45,)*4)
print((45)*4)
print(a)
```

18 What is the output of the following piece of code?

```
print([[i+j for i in "abc"] for j in "def"])
```

19 What is the output of the snippet of code shown below?

```
x=set('abcde')
y=set('xyzbd')
x.difference_update(y)
print(x)
print(y)
```

20 Python Program to Reverse a Given Number

21 Python Program to Find the Sum of Digits in a Number

22 Python Program to Check if a Number is a Palindrome

23 Python Program to Print an Inverted Star Pattern

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

24 Python Program to Swap the First and Last Value of a List

25 Print the multiplication table for given number with specific range[rows]