Date: 31th - 08 - 2020

Morning Session: 9am - 11.00 PM

By ~ Rohan Kumar

Topics: Python Pattern Problems

1)

```
for i in range(4):
    for j in range(4):
        print("*",end=" ")
    print()
* * * *
* * * *
* * * *
* * * *
```

First outer loop is used to handle number of rows and Inner nested loop is used to handle the number of columns

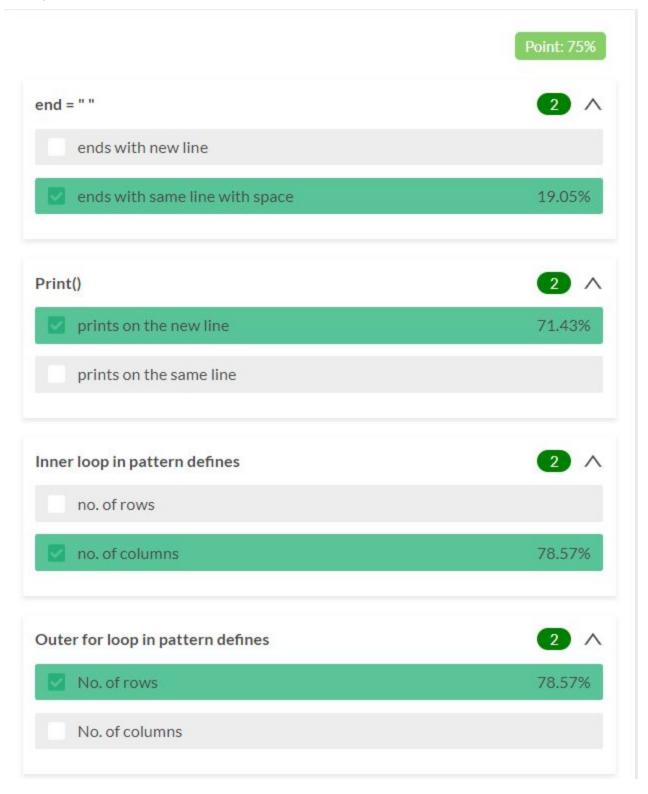
2)

```
for i in range(4):
    for j in range(i+1):
        print("*",end = " ")
    print()

*
* *
* *
* * *
```

```
for i in range(5):
     for j in range(5-i):
         print("*",end = " ")
     print()
4)
 for i in range(5): # no. of rows
     for j in range(5-i-1): #no. of spaces
         print(end=" ")
      for k in range(i+1): # stars
         print("*",end = " ")
     print()
```

MCQ's:



1 2

1 2 3

1 2 3 4

1 2 3 4 5

```
4)
  k = 1
  for i in range(4):
      for j in range(i+1):
           print(k,end = " ")
           k += 1
      print()
  1
  2 3
  4 5 6
  7 8 9 10
5)
 k = 1
  for i in range(5):
      for j in range(i+1):
          print(k,end = " ")
          k += 1
      print()
      k = 1
  1
```

```
6)
```

```
k = 97
for i in range(4):
    for j in range(i+1):
        print(chr(k),end = " ")
        k += 1
    print()
```

b c d e f g h i j

7)

```
n = int(input("enter the n vaulue"))
for i in range(n):
    for j in range(i+1):
        print("*",end = " ")
    print()
```

enter the n vaulue 101

Output:

```
*

* *

* *

* * *

* * *

* * * *

* * * * *

* * * * * *

* * * * * *

* * * * * * *

* * * * * * *

* * * * * * *

* * * * * * * *

* * * * * * * *

* * * * * * * * *

* * * * * * * * *

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