

Date : 31th - 08 - 2020

Morning Session : 9am – 11.00 PM

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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()
```

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

3)

```
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:

Point: 75%

end = " "

2



ends with new line



ends with same line with space

19.05%

Print()

2



prints on the new line

71.43%



prints on the same line

Inner loop in pattern defines

2



no. of rows



no. of columns

78.57%

Outer for loop in pattern defines

2



No. of rows

78.57%



No. of columns

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
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

6)

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

```
a
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

Output:

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