

Exercise 8(b): Pattern Printing [30/09/2019]

Note:

Write each program in separate python file and also prepare a MS Word document with problem, solution and output.

Save your program files in Z:\Python\Ex8b\Prg<no>.py

```
#Write a program to print a square shape of 5X5 of stars.
```

```
##Output
```

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

```
#Write a program to print a square shape of 5X5 of 1's.
```

```
##Output
```

```
1 1 1 1 1
1 1 1 1 1
1 1 1 1 1
1 1 1 1 1
1 1 1 1 1
```

```
#Write a program to print a square shape of 5X5 of 0's.
```

```
##Output
```

```
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
```

```
Write a program to print number pattern of 1's and 0's at alternate rows
```

```
##Output
```

```
1 1 1 1 1
0 0 0 0 0
1 1 1 1 1
0 0 0 0 0
1 1 1 1 1
```

```
# Write a program to print the following pattern:
```

```
1 0 1 0 1
1 0 1 0 1
1 0 1 0 1
1 0 1 0 1
1 0 1 0 1
```

```
# Write a program to print the following pattern:
```

```
1 2 3 4 5 6
2 3 4 5 6 7
3 4 5 6 7 8
4 5 6 7 8 9
5 6 7 8 9 10
```

Write a program to print the following pattern:

```
1  2  3  4  5
6  7  8  9  10
11 12 13 14 15
16 17 18 19 20
21 22 23 24 25
```

Write a program to print the following pattern using single loop:

```
1  2  3  4  5
6  7  8  9  10
11 12 13 14 15
16 17 18 19 20
21 22 23 24 25
```

#Write a program to print a rectangle shape of stars.

##Output

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

Write a program to print the following pattern (hollow square star pattern):

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

Write a program to print the following pattern (rhombus star pattern)

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

Write a program to print the following pattern (hollow rhombus star pattern)

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

#Write a program to display stars in the right angled triangular form using nested loop consisting of 10 lines.

##Output

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

We can also write the above program as follow

##Output

```

*
* *
* * *
* * * *
* * * * *
* * * * * *
* * * * * * *
* * * * * * *
* * * * * * *
* * * * * * *

```

Write a program to print the following pattern:

```

      *
     * *
    * * *
   * * * *
  * * * * *

```

Write a program to print the following pattern:

```

* * * * *
* * * *
* * *
* *
*

```

Write a program to print the following pattern:

```

* * * * *
 * * * *
  * * *
   * *
    *

```

Write a program to print the following pattern:

```

Pass 1 : 1 2 3 4 5
Pass 2 : 1 2 3 4 5
Pass 3 : 1 2 3 4 5
Pass 4 : 1 2 3 4 5
Pass 5 : 1 2 3 4 5

```

Write a program to print the following pattern:

```

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

```

Write a program to print the following pattern:

```

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

```

Write a program to print the following pattern:

```

1
2 2
3 3 3

```

```
4 4 4 4
5 5 5 5 5
```

Write a program to print the following pattern:

```
0
1 2
3 4 5
6 7 8 9
```

Write a program to print the following pattern:

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

Write a program to print the following pattern (Pascal's Traingle):

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

Write a program to print the following pattern

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

Write a program to print the following pattern

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

Write a program to print the following pattern

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

#Write a program to display stars in an equilateral triangular (Pyramid) form using a single for loop.

##Output

```

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

Write a program to print the following pattern

```

      *
    * * *
  * * * * *
* * * * * * *

```

Write a program to print the following pattern

```

* * * * * * * *
 * * * * * * *
  * * * * *
   * * *
    *

```

#A Program to print tables from 1-10 in tabular form

##Output

1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100

#Write A Program to print tables from 1-20 in tabular form

##Output

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20										
2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
32	34	36	38	40										
3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
48	51	54	57	60										
4	8	12	16	20	24	28	32	36	40	44	48	52	56	60
64	68	72	76	80										
5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
80	85	90	95	100										
6	12	18	24	30	36	42	48	54	60	66	72	78	84	90
96	102	108	114	120										
7	14	21	28	35	42	49	56	63	70	77	84	91	98	105
112	119	126	133	140										
8	16	24	32	40	48	56	64	72	80	88	96	104	112	120
128	136	144	152	160										
9	18	27	36	45	54	63	72	81	90	99	108	117	126	135
144	153	162	171	180										
10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
160	170	180	190	200										

#Write A Program to print counting of 1-100 in tabular form

##Output

	1	11	21	31	41	51	61	71
81	91							
	2	12	22	32	42	52	62	72
82	92							
	3	13	23	33	43	53	63	73
83	93							
	4	14	24	34	44	54	64	74
84	94							

	5	15	25	35	45	55	65	75
85	95							
	6	16	26	36	46	56	66	76
86	96							
	7	17	27	37	47	57	67	77
87	97							
	8	18	28	38	48	58	68	78
88	98							
	9	19	29	39	49	59	69	79
89		99						
	10	20	30	40	50	60	70	80
90	100							