

Practice 7 – Nested Loop

Task 01: Write code to generate the output:

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

Task 02: Write code to input rows & columns and print stars in rows and columns. See sample run:

Sample Run:

Rows: 4

Columns: 5

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

Task 03: Write code to input rows and print A to Z in all rows. See sample run:

Sample Run:

Rows: 4

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

Note: Use inner while loop to print A to Z

Task 04: Write code to input rows & columns and print matrix element randomly in range 1-9:

Sample Run:

Rows: 4

Columns: 3

23 45 78

56 78 98

32 67 84

81 64 66

Task 05: Write code to input rows print numbers in the pattern:

Sample Run:

Rows: 4

1 2 3 4 5

2 3 4 5 6

3 4 5 6 7

4 5 6 7 8

Task 06: Write codes to generate following outputs:

Sample Run:

N: 5

K: 3

1 1

1 2

1 3

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

Task 07:

Sample Run:

Rows: 10

Columns: 5

```

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
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

```

Task 08:

Sample Run:

N: 5

K: 3

{(1,1),(1,2),(1,3),(2,1),(2,2),(2,3),(3,1),(3,2),(3,3),(4,1),(4,2),(4,3),(5,1),(5,2),(5,3)}

Task 09:

a. Sample Runs:

Rows: 8

Columns: 3

1 2 3

2 3 4

3 4 5

4 5 6

5 6 7

6 7 8

7 8 9

8 9 10

Rows: 3

Columns: 5

1 2 3 4 5

2 3 4 5 6

3 4 5 6 7

Task 10:

Sample Run:

Rows:5

Columns:6

1

2

3

4

5

Task 11:

Sample Run:

Rows:5

1

2

3

4

5

Task 12:

Sample Run: (Run inner loop for spaces reverse of outer loop)

Rows:5

1

2

3

4

5

Task 13:

Sample Run:

Rows:5

Columns:6

1 1 1 1 1

2 2 2 2 2

3 3 3 3 3

4 4 4 4 4

5 5 5 5 5

Task 14:

Sample Run: (Use two inner loops in one outer loop)

Rows:3

Columns:4

1 1 1 1

a a a a

2 2 2 2

b b b b

3 3 3 3

c c c c

Task 15:

Sample Run:

Rows:3

Columns:4

1 2 3 4

a b c d

2 3 4 5

b c d e

3 4 5 6

c d e f