

LOOP Practice Problems

PROBLEM 1) Rectangle

Sample input:

4

6

Sample output

123456

123456

123456

123456

Hint: 4 and 6 means 4 lines of numbers having 1..6 in each line.

2) Triangle - Left Justified Draw right angled triangle of given height.

Sample input:

4

Sample output

*

**

Hint: One loop for lines, another loop for printing i number of stars when it is line i.

PROBLEM 3) Triangle - Left Justified. Draw right angled triangle of given height .

Sample input:

4

Sample output

1

12

123

1234

PROBLEM 4) Triangle - Right Justified. Draw right angled triangle of given height.

Sample input:

4

Sample output

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

Hint: Count and print appropriate number of spaces in front of stars. Notice that there is one less space and one more star in each line.

PROBLEM 5) Triangle - Right Justified, Draw right angled triangle of given height.

Sample input:

4

Sample output

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

6) Triangle - Isosceles . Draw triangle of given height .

Sample input 1:

3

Sample output 1:

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

Sample input 2:

4

Sample output 2:

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

PROBLEM 7) Triangle - Isosceles .Draw triangle of given height.

Sample input 1:

3

Sample output 1:

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

Sample input 2:

4

Sample output 2:

```
1
123
12345
1234567
```

8) Rhombus .Just draw the image of the above triangle once. And then, the opposite, once.

Sample input:

3

Sample output

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

PROBLEM 9) Rhombus . Just draw the image of the above triangle once. And then, the opposite, once.

Sample input:

3

Sample output

```
1
123
12345
123
1
```

PROBLEM 10) Hollow Rectangle . Display a rectangle of given length and width.

Sample input:

4

5

Sample output

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

Hint 1: Print the character space (' ') in the middle.

Hint 2: You can re-use your solution to PROBLEM 2 and use if condition to selectively print first and last star of each line and all stars of first and last line.

PROBLEM 11) Hollow Rectangle . Display a rectangle of given length and width.

Sample input:

4

5

Sample output

12345

1 5

1 5

12345

PROBLEM 12) Triangle - Left Justified Draw right angled triangle of given height Sample input: 5

Sample output

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

PROBLEM 13) Hollow Triangle - Left Justified. Draw right angled triangle of given height.

Sample input: 5

Sample output

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

PROBLEM 14) Hollow Triangle Draw right angled triangle of given height Sample input: 5

Sample output

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

PROBLEM 15) Hollow Triangle – Isosceles. Draw triangle of given height.

Sample input 1:

3

Sample output 1:

```
  1
 1 3
12345
```

Sample input 2:

4

Sample output 2:

```
  1
 1 3
1  5
1234567
```

16) Rhombus

Just draw the image of the above triangle once. And then, the opposite, once. Sample input: 3

Sample output

```
  1
 1 3
1  5
 1 3
  1
```

PROBLEM 17) Palindrome Sample input: 5

Sample output

123454321

PROBLEM18) Palindromic Triangle Sample input: 5

Sample output

```
  1
 121
12321
1234321
123454321
```