

LoopsLab1 - Computer Science 1 Pre-AP

The following lab is to help you understand the usage of for loops, while loops, and if statements in Python. The following mini labs will help with the syntax required to correctly create a loop and use the loop to get the desired output for each of the mini labs.

File Name: LoopsLab1_yln.py

mini lab #1 - row5Stars:

Write a **return** method that will output five stars in a **row** using a **while** loop. There is no input for this method, just the output.

mini lab #2 - row5Stars2:

Write a **return** method that will output five stars in a **row** using a **for** loop. There is no input for this method, just the output.

mini lab #3 - rowNStars:

Write a **return** method that will receive an integer parameter (user input) **num** and output the **num** stars in a **row** using a **while** loop. Test your code by using **5**, **10**, and **20** to see if it prints the correct number of stars.

mini lab #4 - rowNStars2:

Write a **return** method that will receive an integer parameter (user input) **num** and output the **num** stars in a **row** using a **for** loop. Test your code by using **5**, **10**, and **20** to see if it prints the correct number of stars.

mini lab #5 - colNStars:

Write a **return** method that will receive an integer parameter (user input) **num** and output the **num** stars in a **column** using a **while** loop. Test your code by using **5**, **2**, and **3** to see if it prints the correct number of stars.

mini lab #6 - colNValues:

Write a **return** method that will receive an integer parameter (user input) **num** and output the values in a **column** using a **while** loop. Test your code by using **5**, **2**, and **3** to see if it prints the correct numbers.

mini lab #7 - MtoNValues:

Write a **return** method that will receive two integer parameter (user input) **start** and **stop**, then output the values in a row from the **start** value to the **stop** value using a **for** loop. Test your code by using (5, 10), (2,7) and (3, 21) to see if it prints the correct numbers.

mini lab #8 – MtoNEvens:

Write a **return** method that will receive two integer parameter (user input) **start** and **stop**, then output the **even** values in a row from the **start** value to the **stop** value using a **while** loop. Test your code by using (5, 10), (2,7) and (3, 21) to see if it prints the correct numbers.

mini lab #9 – MtoNOdds:

Write a **return** method that will receive two integer parameter (user input) **start** and **stop**, then output the **odd** values in a row from the **start** value to the **stop** value using a **while** loop. Test your code by using (5, 10), (2,7) and (3, 21) to see if it prints the correct numbers.

Output for the whole lab should be as follows, ALL output is done at the same time. Look at the headings of each output to make sure it is identified:

```
----jGRASP exec: python LoopsLab.py
```

```
mini Lab #1 – row5Stars
```

```
*****
```

```
mini lab #2 – row5Stars2
```

```
*****
```

```
mini lab #3 – rowNStars
```

```
Enter the number of stars to be printed: 5
```

```
*****
```

```
Enter the number of stars to be printed: 10
```

```
*****
```

```
Enter the number of stars to be printed: 20
```

```
*****
```

```
mini lab #4 – rowNStars2
```

```
Enter the number of stars to be printed: 5
```

```
*****
```

```
Enter the number of stars to be printed: 10
```

```
*****
```

```
Enter the number of stars to be printed: 20
```

```
*****
```

```
mini lab #5 – colNStars
```

```
Enter the number of stars to be printed: 5
```

```
*
```

```
*
```

*
*
*

Enter the number of stars to be printed: 2

*
*

Enter the number of stars to be printed: 3

*
*
*

mini lab #6 - colNValues

Enter the number of value to be printed: 5

1
2
3
4
5

Enter the number of value to be printed: 2

1
2

Enter the number of value to be printed: 3

1
2
3

mini lab #7 - MtoNValues

Enter the starting value to be printed: 5

Enter the stopping value: 10

5 6 7 8 9 10

Enter the starting value to be printed: 2

Enter the stopping value: 7

2 3 4 5 6 7

Enter the starting value to be printed: 3

Enter the stopping value: 21

3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

mini lab #8 - MtoNEvens

Enter the starting value to be printed: 5

Enter the stopping value: 10

6 8 10

Enter the starting value to be printed: 2

Enter the stopping value: 7

2 4 6

Enter the starting value to be printed: 3

Enter the stopping value: 21

4 6 8 10 12 14 16 18 20

mini lab #9 - MtoNOdds

Enter the starting value to be printed: 5

Enter the stopping value: 10

5 7 9

Enter the starting value to be printed: 2

Enter the stopping value: 7

3 5 7

Enter the starting value to be printed: 3

Enter the stopping value: 21

3 5 7 9 11 13 15 17 19 21

----jGRASP: operation complete.