

ASSIGNMENT 3

WHILE LOOPS (BEGINNER LEVEL)

NOTE:

- No need to submit anywhere, just keep track of all the Code you made in a specific folder like in VS Code
- Compare your solution with the solution I'll provide, in case of doubts, kindly reach out to me after the session

Q1. Ask a positive number from user. Print from **1 to n**.

Example 1:

Enter a number = 6

Output:

1 2 3 4 5 6

Q2. Ask a positive number from user. Calculate the total sum of all the numbers from **1 to n**.

Example 1:

Enter a number = 6

Output:

21

Example 2:

Enter a number = 10

Output:

55

Q3. Ask a **start number** and **end number** from user. Calculate the total sum of all the numbers from **start to end**.

Example 1:

Enter start = 5

Enter end = 10

Output:

45

Example 1:

Enter start = 99

Enter end = 103

Output:

505

Q4. Ask a positive number from user. Print from **n to 1**.

Example 1:

Enter a number = 6

Output:

6 5 4 3 2 1

Q5. Ask a positive number from user. Print from **n to -n**.

Example 1:

Enter a number = 6

Output:

6 5 4 3 2 1 0 -1 -2 -3 -4 -5 -6

Q6. Print all the numbers divisible by 2, 3 and 5 from **start to end**. Ask start and end numbers from the user.

Example 1:

Enter start = 5

Enter end = 177

Output:

30 60 90 120 150

Example 2:

Enter start = 876

Enter end = 2000

Output:

900 930 960 990 1020 1050 1080 1110 1140 1170 1200 1230 1260 1290 1320 1350 1380
1410 1440 1470 1500 1530 1560 1590 1620 1650 1680 1710 1740 1770 1800 1830 1860 1890
1920 1950 1980

Q7. Ask a number from user. Print the multiplication table of that number.

Example:

Enter number = 13

Output:

13 x 1 = 13
13 x 2 = 26
13 x 3 = 39
13 x 4 = 52
13 x 5 = 65
13 x 6 = 78
13 x 7 = 91
13 x 8 = 104
13 x 9 = 117
13 x 10 = 130

Q8. Ask a **start number** and **end number** from user. Ask another number **n** from the user. Print all the numbers from start to end divisible by n.

Example 1:

Enter start = 50
Enter end = 192
Enter n = 13

Output:

52 65 78 91 104 117 130 143 156 169 182

Example 2:

Enter start = 1
Enter end = 100
Enter n = 24

Output:

24 48 72 96

Q9. Count the number of odd and even numbers from **start to end**. Ask start and end number from user.

Example 1:

Enter start = 1
Enter end = 100

Output:

Even = 50
Odd = 50

Q10. Ask two number from user that is start and end. Also start can be greater or smaller than the end number. Print from start to end. See the examples below.

Example 1:

Enter start = 5

Enter end = 10

Output:

5 6 7 8 9 10

Example 2:

Enter start = 9

Enter end = 1

Output:

1 2 3 4 5 6 7 8 9

Example 3:

Enter start = 9

Enter end = -3

Output:

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

Example 4:

Enter start = -11

Enter end = -6

Output:

-11 -10 -9 -8 -7 -6

Q11. Print the following pattern. Ask **n** from user.

Example 1:

Enter n = 6

Output:

1 2 4 8 16 32

Example 1:

Enter n = 10

Output:

1 2 4 8 16 32 64 128 256 512

Q12. Print the following pattern. Ask **n** from user.

Example 1:

Enter n = 5

Output:

1 11 111 1111 11111

Example 1:

Enter n = 7

Output:

1 11 111 1111 11111 111111 1111111