

Practice #5: The for loop

Objectives:

- Understand and use the for loops.

Steps:

1. All numbers.

- Print all numbers between 5 and 50 (included) on the same line with one space between each.

Output:

5 6 7 8 9 10 11 12 13 48 49 50

2. Give user information.

- Ask for user three inputs: a start, an end and a step and print all number according to these inputs.

Input:

Enter the start: 56

Enter the end: 80

Enter the step: 3

Output:

56 – 59 – 62 – 65 – 68 – 71 – 74 – 77 –

3. The pyramid

- Ask for the user the size of the base of the required pyramid and print a pyramid of stars according to the size of the base. (If user enter 6, the pyramid should have 6 stars width base)

Input:

Enter the width of the pyramid: 5

Output:

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

4. The complex pyramid

- Ask for the user the height of the required pyramid and print a pyramid of stars according to the input. (If user enter 6, the pyramid should have 6 lines of stars)

Input:

Enter the height of the pyramid: 5

Output:

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

5. The prime numbers

- Ask for the user a number. Your program will tell if it's a prime number. The definition of a prime number is: "a whole number greater than 1 that cannot be exactly divided by any whole number other than itself and 1 (e.g. 2, 3, 5, 7, 11). »

Input:

Enter a number: 11

Output:

It's a prime number.

Input:

Enter a number: 8

Output:

No because: $4 \times 2 = 8$

Input:

Enter a number: 96431

Output:

It's a prime number.

Input:

Enter a number: 96435

Output:

No because: No because: $32145 \times 3 = 96435$