Practice #6: The while loop

Objectives:

- Understand and use the while loop.

Steps:

1. **All numbers.**

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

Output:

5 6 7 8 9 10 11 12 13 ……. 48 49 50

2. **The user division.**

- Ask for user one number. Print the division by 2 and the division by 2 of the result, …. until the odd number

Input:

Enter the number: 24

Output:

24 12 6 3

Input:

Enter the number: 964

Output:

964 482 241

3. **The crazy bot**

- Ask for user to say hello and repeat it until he says it. The bot becomes crazier and crazier if the user doesn't say hello.

Example (user input are in italics):

Hello! *Hi!*

I said hello, do you have something to say to me? *Yo!*

I said hello, do you have something to say to me? *Bonjour!*

I said hello, do you have something to say to me? *Salem!*

You have to say hello to me! *Buenos Dias!*

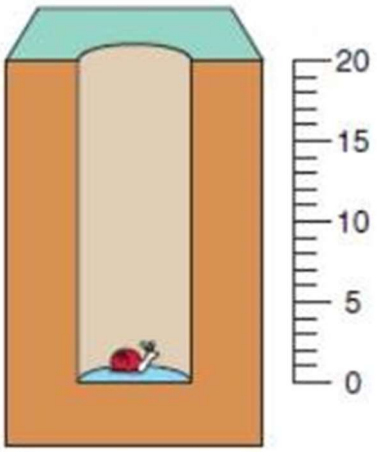
You have to say hello to me! *Buongiorno!*

You have to say hello to me! *Bom dia!*

I SAID HELLO, ANSWER HELLO! *Hello*

Thank you, how are you?

4. **The snail simple**



- Suppose there is a well with a depth of 30 meters deep. A snail is at the bottom of this well. The snail can climb 7 meters per day. However, during the night, it slides down 5 meters. How many days will it take to get out of the well?

Output:

13 days.

5. **The snail complex**

- The problem is the same than the previous one. Just modify your code to give the user the possibility to change the variable of the problem.

Input:

Enter the depth of the well: 97

Enter the daily distance climbed by the snail: 10

Enter the night distance slide down by the snail: 9

Output:

- The snail will exit in 89 days.

Input:

Enter the depth of the well: 12

Enter the daily distance climbed by the snail: 9

Enter the night distance slide down by the snail: 6

Output:

The snail will exit in 3 days.

6. **The snail complex with security**

- The problem is the same than the previous one. Just modify your code to print a message and ask the inputs again if the “daily distance climbed by the snail” is smaller than the “the night distance slide down by the snail”.

Input:

Enter the depth of the well: 12

Enter the daily distance climbed by the snail: 3

Enter the night distance slide down by the snail: 4

No sorry, the daily distance has to be bigger than the night distance, enter them again!

Enter the daily distance climbed by the snail: 1

Enter the night distance slide down by the snail: 10

No sorry, the daily distance has to be bigger than the night distance, enter them again!

Enter the daily distance climbed by the snail: 9

Enter the night distance slide down by the snail: 6

Output:

The snail will exit in 3 days.