

Homework #7 Review.

In this homework you will have to figure out which problem require if statement, for loop or while loop. Test your program to see if your solution is correct and the output is consistent.

Tasks:

1. For the given integer X print 1 if it's positive, -1 if it's negative, or 0 if it's equal to zero.

Try to use the cascade if-elif-else for it.

2. Print out all the numbers in a range given by a user that do not end with a 7 or have zero in them.

3. For the given range given by a user calculate the sum of its cubes.

For example: N = 4

$$1^3 + 2^3 + 3^3 + 4^3 = 1 + 8 + 27 + 64 = 100$$

Output: 100

4. Write a Python program to convert temperatures to and from celsius, fahrenheit.

Formula : $c/5 = f-32/9$ (where c = temperature in celsius and f = temperature in Fahrenheit)

Output :

60°C is 140 in Fahrenheit

45°F is 7 in Celsius

5. Print out the positions on a square grid using [x,y] coordinates in reverse order. The user sets the size of the grid.

Example: size = 4

Output:

(4,4) (4,3) (4,2) (4,1)

(3,4) (3,3) (3,2) (3,1)

(2,4) (2,3) (2,2) (2,1)

(1,4) (1,3) (1,2) (1,1)

6. Ask the user to enter two integers. Then ask the user to calculate the product of the two integers. The user has three attempts to give a correct answer. If the correct answer is not given the program terminates providing a correct answer to the user.