

CS 201 Homework #6

Deadline: November 2nd, 9:00 pm. Save your code as lastname_homework6.py and submit on Edmodo.

Questions/Tasks:

- 1) Print all odd numbers between 10 (included) and 40 in decreasing order
- 2) Print all hundredths between 0.1 and 0.3 (included), for example, 0.10, 0.11, 0.12 and so on all the way to 0.30 (included).
- 3) Print all multiples of 7 between 0 and 100 (included). Use for i in range loop to iterate over the numbers between 0 and 100. Use while/break and modulus operator to identify and print the relevant numbers. Repeat the task but replace while/break with IF statement.
- 4) The following is a Python list that contains the names of Spring months:

```
months = ["March", "April", "May"]
```

Use for loop to print the name of each month (consult the classwork slides if you need help).

*(more difficult task; requires nested loops) Use for loop to print the name of each month and then the letters it consists of. For example:

```
March
M
a
r
c
h
```

5) Print all even numbers between 0 and 200 (included) which have a "7" in them. Hints: This task involves string conversion and multiple loops.

6) For this task you should use IF statement. Find all numbers between 0 and 1000 that include "0". You don't need to print these numbers. You need to count: How many such numbers are there? What is their sum? Your output should look like this:

Number 0: There are 182 numbers. The sum of these numbers is 91405.

7) Write a script to repeat the task above for all numbers between "0" and "9". Your output should look like this:

Number 0: There are 182 numbers. The sum of these numbers is 91405.

Number 1: There are 272 numbers. The sum of these numbers is 104896.

Number 2: There are 271 numbers. The sum of these numbers is 112887.

...And so on all the way to Number 9.