## ${\rm CS} \ 101 \\ {\rm HOMEWORK} \ 5: \ {\rm FOR} \ {\rm AND} \ {\rm WHILE} \ {\rm LOOP} \ {\rm EXERCISES} \\$

Create a new Python script file that you will name *yourname\_homework5.py* Save this file in a folder on your computer where you will keep all your homework assignments. Write some Python code inside this file that I will be able to run on my computer without errors.

When finished, upload your file in Google Classroom using the Homework 5 assignment link. Don't forget to add comments at the beginning of each task and throughout your code for clarity.

## Tasks

```
1. What is the value of x? x = 0
  a = 5
  b = 5
  if a > 0:
       if b < 0:
           x = x + 5
       elif a > 5:
           x = x + 4
       else:
           x = x + 3
  else:
       x = x + 2
  print(x)
2. What is the output?
  for num in range (-2, -5, -1):
       print(num, end=", ")
3. What is the putput?
  a, b = 12, 5
   if a + b:
       print('True')
     print('False')
4. What is printed out?
  x = 0
  for i in range(10):
     for j in range(-1, -10, -1):
       x += 1
  print(x)
```

5. \* Write a program in which a user plays rock, paper, scissors with the computer. The rules are: rock beats scissors, scissors beats paper and paper beats rock. Assume the choice 1 is for rock, choice 2 is for scissors and choice 3 is for paper.