Make sure your name is on all pages turned in. **TAKE YOUR TIME and READ QUESTIONS CAREFULLY!** I give partial credit, so if you don't know the complete answer to a question, write down the parts that you do know. Unless a question asks you to write a complete program, you only need to write the statements required to perform the requested task. TOTAL POINTS = 60.

1. (13 points) Write a function (readFile) which will read integers from a file (numbers.txt). The function will
   1. calculates the average of all the numbers stored in the file.
   2. returns the average.
2. (13 pts) Write a function (getCount) that will allow the users to enter integer numbers. The program will terminate when -999 is entered.

The program

* Returns the count of numbers that are divisible by 10.

3.(10 pts) What value is printed by the call findValue(10, 3, 7) for the function calculate below?

def findValue (a, b, c):

if (a == c % b):

return a // c

elif (a – c != 3):

if (b >= c):

return b % c

else:

return c \* a

return a \* b % c

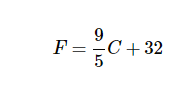
print(findValue(10, 3, 7))

What value it will print: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. (13 points) The date *June 10, 1960*, is special because when it is written numerically, the month time the day equals the year:  
     
   *6/10/60 --> 6\*10 = 60*  
     
   Design a function (doCalculation) that
   1. asks the user to enter a month (in numeric form), a day, and a two-digit year in three separate inputs.
   2. The program should determine whether the month times the day equals the year.
   3. If so, it should print, "This date is magic!" Otherwise, it should print, "This date is not magic."

5. (11 points) Write a function that displays the Fahrenheit equivalents of Celsius temperatures. The function will have the Celsius as the parameter.

The formula for converting a temperature from Celsius to Fahrenheit is

  
where F is the Fahrenheit temperature, and C is the Celsius temperature.

Your function returns the Fahrenheit equivalents.