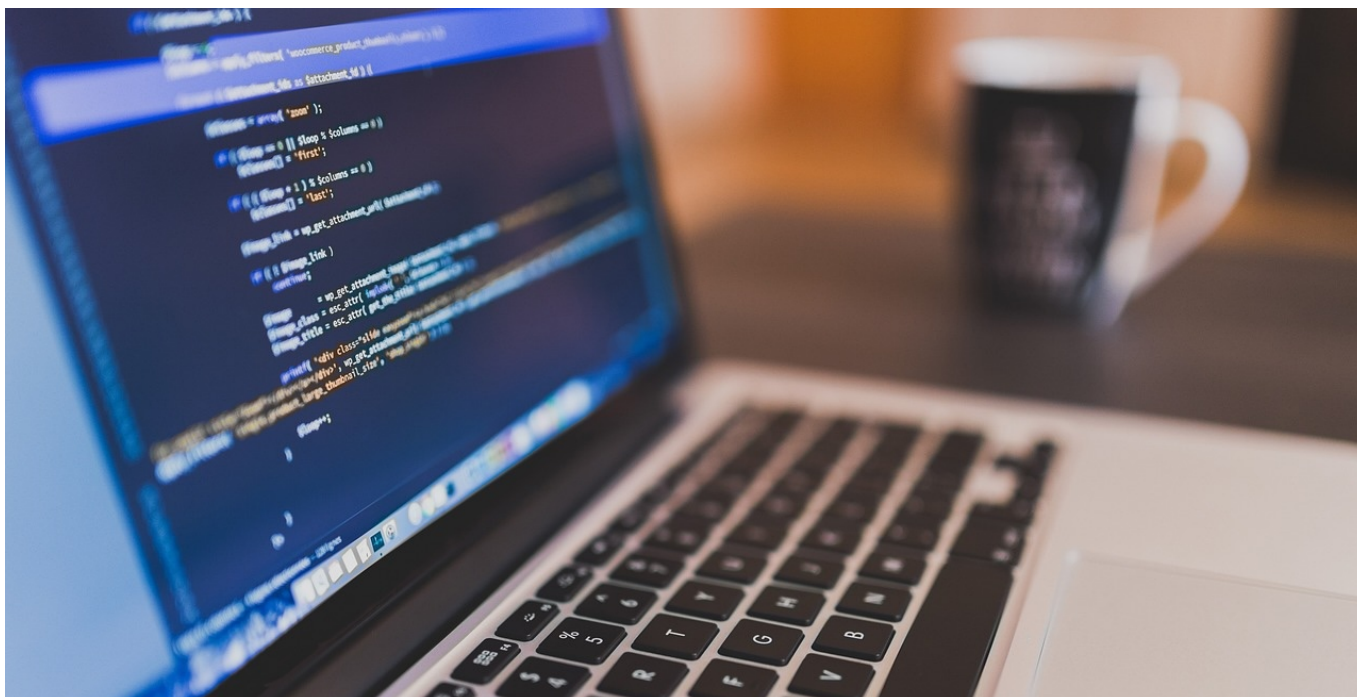


# Programming Challenge: The Average

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In this challenge, the student will complete a Python program that calculates the average of four grades and converts the numeric average to a text grade. The challenge is divided into several steps that require defining functions and using them to process grades.

## Instructions

### Function Definitions:

- **getAverage:** This function will take four numeric inputs (representing grades) and calculate their average. The student needs to complete the function.
- **getTextGrade:** This function will convert a numeric grade to a corresponding text grade. The student should define logic to return: "Fail" for grades between 0 and 5 (not included), "Good" for grades between 5 and 7.5 (not included), or "Very Good" for grades 7.5 and above

### Assign Values to Variables:

The student will assign values to the four grade variables (t1, t2, t3, t4).

### Calculate the Average:

Use the getAverage function to calculate the average of the four grades.

### Round the Average:

The student must round the average to two decimal places using the round() function.

### Determine the Text Grade:

The student will use the getTextGrade function to convert the numeric average into a text grade.

## Print the Final Grade:

Finally, the student will print the final result, displaying both the numeric average and the corresponding text grade.

## The Code

```
# Filename: get_average_template.py
# Author: Write here your name
# Date: Write here the current date

# IMPORTANT: Please read the instructions in the comments

# COMPLETE: define a function that calculates the average of 4 numbers:
x1, x2, x3, and x4
def getAverage( ? ):
    # here your code

# COMPLETE: define a function that converts a grade from number (ngrade)
to text (tgrade)
# (i.e.: 7.4 --> NT)
# 0 <= num < 5 --> Fail
# 5 <= num < 7.5 --> Good
# 7.5 <= num --> Very good
def getTextGrade( ? ):
    # here your code

# COMPLETE: assign values to the variables
t1 =
t2 =
t3 =
t4 =

# COMPLETE: Use a function get the average of those 4 grades t1,t2,t3 and
t4
average =

# This line rounds the average with 2 decimals
average = round(average,2)

# COMPLETE: Use a function to get the text grade from the numeric average
text_average =

# COMPLETE: print the final grade. Example: Final grade: 8.03 (Very Good)
print("Final grade: " + str(average) + " (" + text_average + ")")
```

## Solution

### ► Solution

IMPORTANT: Please read the instructions in the comments

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COMPLETE: define a function that calculates the average of 4 numbers: x1, x2, x3, and x4

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```
def getAverage(x1, x2, x3, x4): # Calculate and return the average of the 4 numbers return (x1 + x2 + x3 + x4) / 4
```

COMPLETE: define a function that converts a grade from number (ngrade) to text (tgrade) (i.e.: 7.4 --> NT)

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0 <= num < 5 --> Fail

---

5 <= num < 7.5 --> Good

---

7.5 <= num --> Very good

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```
def getTextGrade(ngrade): # Convert numeric grade to text grade if 0 <= ngrade < 5: return "Fail" elif 5 <= ngrade < 7.5: return "Good" else: return "Very Good"
```

COMPLETE: assign values to the variables

---

```
t1 = 6.8 # Example grade 1 t2 = 7.4 # Example grade 2 t3 = 5.5 # Example grade 3 t4 = 8.2 # Example grade 4
```

COMPLETE: Use a function to get the average of those 4 grades t1,t2,t3 and t4

---

```
average = getAverage(t1, t2, t3, t4)
```

This line rounds the average to 2 decimals

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```
average = round(average, 2)
```

COMPLETE: Use a function to get the text grade from the numeric average

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```
text_average = getTextGrade(average)
```

**COMPLETE:** print the final grade. Example: Final grade: 8.03 (Very Good)

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```
print("Final grade: " + str(average) + " (" + text_average + ")")
```

```
</details>
```

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```