





Homework 2

 Date	@August 22, 2024
 Week	Semana 3

Grade Calculator

Input:

- 6 different grades for 1 student.

Output:

- Average grade and the letter.

Process:

1. Create a dictionary in which the grades will be saved.
2. Create a for loop x6 that asks for the grade and saves them in the dic.
3. Average = `dic.sum/dic.lenght()`
4. IF average:
 - a. 90 - 100 → print (A)
 - b. B: 80 - 89 → print B
 - c. C: 70 - 79 → print C

d. D: 60 - 69 → print D

e. F: Below 60 → Print F

Test Case:

Grades: [90, 91, 89, 83, 100, 93]

Average = $546 / 6 = 91 \rightarrow A$

Terminal:

```
✓ TERMINAL Python + ▢ 🗑️ ·
/usr/local/bin/python3.12 /Users/ximyer/Desktop/A-TEC/week3/hw2.py
● ximyer@Yeraldins-MacBook-Air week3 % /usr/local/bin/python3.12 /Users/ximyer/Desktop/A-TEC/week3/hw2.py
GRADE 1
Input your grade:90
GRADE 2
Input your grade:91
GRADE 3
Input your grade:89
GRADE 4
Input your grade:83
GRADE 5
Input your grade:100
GRADE 6
Input your grade:93
91.0 A
○ ximyer@Yeraldins-MacBook-Air week3 %
```

BMI Calculator

Input

- Weight
- Height

Output

- Description of IMC

Process

1. Ask for weight and save it in a variable.
2. Ask for height and save it in a variable.
3. Use the formula: $\text{index} = \text{weight} / \text{height}^2$
4. Based on the result of index, write the possible scenarios.
5. IF:
 - a. $\text{index} < 18.5$ 'LOW WEIGHT'
 - b. $18.5 \leq \text{index} < 24.9$ 'NORMAL'
 - c. $24.9 \leq \text{index} < 29.9$ 'OVERWEIGHT'
 - d. $\text{index} < 40$ 'OBESITY'
 - e. No valid data?
6. Print the valid scenario.




Test Case:

- Weight = 56
- Height = 1.45
- BMI = $56 / (1.45^2) = 26.66 \rightarrow \text{Overweight}$

```
✓ TERMINAL Python + ▢ ▢  
/usr/local/bin/python3.12 /Users/ximyer/Desktop/A-TEC/week3/hw1.py  
● ximyer@Yeraldins-MacBook-Air week3 % /usr/local/bin/python3.12 /Users/ximyer/Desktop/A-TEC/week3/hw1.py  
Weight in kg: 56  
Height in m: 1.45  
Overweight  
○ ximyer@Yeraldins-MacBook-Air week3 %
```

Menu

✓ **TERMINAL**

 **Python** + ▾   ...

```
/usr/local/bin/python3.12 /Users/ximyer/Desktop/A-TEC/week3/homework.py
```

- ximyer@Yeraldins-MacBook-Air week3 % /usr/local/bin/python3.12 /Users/ximyer/Desktop/A-TEC/week3/homework.py

```
My Homework 3 Menu
```

- 1) BMI Calculator
- 2) Grades Average Calculator

```
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```

```
What you wanna test? 2
```

```
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```

```
GRADE 1
```

```
Input your grade:91
```

```
GRADE 2
```

```
Input your grade:99
```

```
GRADE 3
```

```
Input your grade:98
```

```
GRADE 4
```

```
Input your grade:99
```

```
GRADE 5
```

```
Input your grade:100
```

```
GRADE 6
```

```
Input your grade:99
```

```
97.66666666666667 A
```

- ximyer@Yeraldins-MacBook-Air week3 % /usr/local/bin/python3.12 /Users/ximyer/Desktop/A-TEC/week3/homework.py

```
My Homework 3 Menu
```

- 1) BMI Calculator
- 2) Grades Average Calculator

```
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```

```
What you wanna test? 1
```

```
-----
```

```
Weight in kg: 87
```

```
Height in m: 1.99
```

```
Normal Weight
```

- ximyer@Yeraldins-MacBook-Air week3 % █

