

## Final Exam (Python Batch, Intermediate)

### Instructions:

- Answer all questions
- Think TWICE, Then Answer
- Code Documentation is OPTIONAL, but following that you can achieve bonus points
- Use a .txt text file for short questions, and separate .py files for each Python file. Naming conventions must be maintained. SEE Tutorial Video for that.
- Enjoy your exam, BEST OF LUCK :-)

### Part A: Short Questions

1. Write a python code where you will take one integer input from the user and print it whether the number is EVEN or ODD.
2. Take 4 inputs from the user and solve this equation  $(x-y) * z / f$  in python using the BODMAS rule.
3. Take an integer input which is considered as Kilometer Per Hour (KMPH) and now convert the KMPH to MPH.  $\{0.6214 * \text{KMPH}\}$
4. If you know the “CRUD” operation, explain D and C with examples.
5. As a programmer you have got a tough and important task. Lots of hatred is used in social media against some minor groups. Suppose the user gives you a BIG string, where lots of hashtags are used, you have to find the words which have hashtags and send them to the analytic team. Can you do that? See the Example below.  
example: text = “#StopBully#Minor#Group” , output text =  
[“StopBully”, “Minor”, “Group”]

## Part B: Coding

### Problem No. 1:

Write a program that reads an employee's number, his/her worked hours number in a month and the amount he received per hour. Print the employee's number and salary that he/she will receive at end of the month, with two decimal places.

- Don't forget to print the line's end after the result, otherwise you will receive "Presentation Error".
- Don't forget the space before and after the equal signal and after the U\$.

### Input

The input file contains 2 integer numbers and 1 value of floating point, representing the number, worked hours amount and the amount the employee receives per worked hour.

### Output

Print the number and the employee's salary, according to the given example, with a blank space before and after the equal signal.

Input Samples	Output Samples
25 100 5.50	NUMBER = 25 SALARY = U\$ 550.00
1 200 20.50	NUMBER = 1 SALARY = U\$ 4100.00

## Problem No. 2:

Using the following table, write a program that reads a code and the amount of an item. After, print the value to pay. This is a very simple program with the only intention of practice of selection commands.

CODE	SPECIFICATION	PRICE
1	Cachorro Quente	R\$ 4.00
2	X-Salada	R\$ 4.50
3	X-Bacon	R\$ 5.00
4	Torrada simples	R\$ 2.00
5	Refrigerante	R\$ 1.50

## Input

The input file contains two integer numbers **X** and **Y**. **X** is the product code and **Y** is the quantity of this item according to the above table.

## Output

The output must be a message "Total: R\$ " followed by the total value to be paid, with 2 digits after the decimal point.

Input Sample	Output Sample
3 2	Total: R\$ 10.00
4 3	Total: R\$ 6.00
2 3	Total: R\$ 13.50

**Problem No. 3:**

Make a program that reads five integer values. Count how many of these values are even and print this information like the following example.

**Input**

The input will be 5 integer values.

**Output**

Print a message like the following example with all letters in lowercase, indicating how many even numbers were typed.

Input Sample	Output Sample
7 -5 6 -4 12	3 valores pares

*END*