

PYTHON EXERCISES_1

Exercise 1: Working on functions

Let's create functions that calculate your vacation's costs:

- 1) Create a variable that saves the user's answer from the question: How many nights will you stay at the hotel?
- 2) Define a function called **hotel_cost**, that takes one argument: *nights*. This argument is the variable created previously.
The hotel costs \$140 per night. So, the function **hotel_cost** should return $140 * \text{nights}$.
- 3) Create a variable that saves the user's answer from the question: Where will you travel?
- 4) Define a function called **plane_ride_cost** that takes one argument: *city*. This argument is the variable created previously.
The function should return a different price depending on the location.

```
"London": 183$  
"Paris": 220$  
Any other destination: 300$
```

- 5) Create a variable that saves the user's answer from the question: How many days will you rent a car?
- 6) Define a function called **rental_car_cost** that takes one argument: *days*. This argument is the variable created previously.
The function should return the cost of renting a car:

```
Every day you rent the car costs $40  
If you rent the car for between 3 to 7 days, you get $20 discount on your total  
If you rent the car for 7 or more days, you get $50 discount on your total
```

- 7) Define a function called **total_trip_cost** that takes three arguments: *city*, *nights*, *days*.
The function should return the total cost of the vacation by calling the three functions created above.
Example: The car cost: \$x, the hotel cost: \$y, the plane tickets cost: \$z. The total is \$a
- 8) Call the function **total_trip_cost**

Exercise 2: Working on dictionaries

- 1) Create a dictionary call **store**. Inside this variable, translate this information into keys and values

```
name: Zara  
creation_date: 1975  
creator_name: Amancio Ortega Gaona  
type_of_clothes: men, women, children, home  
international_competitors: Gap, H&M, Benetton  
number_stores: 7000  
major_color: France -> blue, Spain -> red, US -> pink, green
```

- 2) Change the number of stores to 2
- 3) Print a sentence that explains who the clients of Zara are
- 4) Add this information *country_creation: Spain*
- 5) If the key *international_competitors* is in the dictionary, add the store Desigual

- 6) Delete the information about the date of creation
- 7) Print the last international competitor
- 8) Print in a sentence, the major colors in the US
- 9) Print the length of the store information
- 10) Print the keys of the store information
- 11) Create another dictionary called **store1** with this information

```
creation_date: 1975  
number_stores: 10 000
```

store1 is a dictionary that adds and modifies the first dictionary. Use a method to add this new information to the variable **store**. Then print the value of the key *number_stores*

- 12) Add to the variable **store**, an empty dictionary called *stores_worldwide*
- 13) Create a function **addStore** with two arguments: *country*, *number*.
This function should check if the key: *stores_worldwide* exists inside the dictionary.
If it does, then add to it, the country as a key and the number as its value.
Print the value of the key *stores_worldwide*
- 14) Add the key: *add_store* to the variable **store**. Its value is the function created above. Call it.