

Here we have a function that multiplies two numbers and prints a string with the total. The default value of `num2` is 5, so when we call the function and give the argument 6, that means that `num1 = 6` - we don't need to give an argument for `num2`, it will default to 5. Therefore, when we print out `times_5`, the output will be:

```
6 * 5 = 30
```

However, it is possible to change the value of `num2`. Have a look at the example below:

```
def multiply(num1,num2 = 5):  
    total = num1 * num2  
    print(f"{num1} * {num2} = {total}")  
  
times_7 = multiply(6, 7)
```

Here, even though `num2` still has a default value of 5, we have overwritten that to give it a value of 7. Now, the output will be:

```
6 * 7 = 42
```

We could also call the function using keyword arguments so the order in which we write the arguments doesn't matter. For example, using the above function:

```
times_9 = multiply(num2=6, num1=9)
```

### Output:

```
9 * 6 = 54
```

## Instructions

First, read the **files in the Example folder**. Open it using VS Code or Anaconda.

- Make sure you read all of the examples.
- You may run the **example files** to see the output. Feel free to write and run your own example code before doing the Task to become more comfortable with Python.

# Compulsory Task 1

Follow these steps:

- Create a Python file called **holiday.py** in your folder. Your task will be to calculate a user's holiday cost **including** the plane cost, hotel cost, and car rental cost.
- First, get the following user inputs:
  - **city\_flight**: The city they will be flying to. (You can create some options for them. Remember: Each city will have different flight costs.)
  - **num\_nights**: The number of nights they will be staying at a hotel
  - **rental\_days**: The number of days that they will be hiring a car for.
- Next, create the following four functions:
  - **hotel\_cost**: This function will take the **num\_nights** as an argument, and return a total cost for the hotel stay (You can choose the price per night charged at the hotel).
  - **plane\_cost**: This function will take the **city\_flight** as an argument and return a cost for the flight (**hint**: use if/else if statements in the function to retrieve a price based on the chosen city).
  - **car\_rental**: This function will take the **rental\_days** as an argument and return the total cost of the car rental (you can choose the daily rental cost.)
  - **holiday\_cost**: This function will take the three arguments **hotel\_cost**, **plane\_cost**, **car\_rental**. Using these three arguments, you can call all three of the above functions with respective arguments and finally return a total cost for your holiday.
- Print out all the details about the holiday in a readable way!
- Try using your program with different combinations of input to show its compatibility with different options.