## 📝 Python Practice – Return Values, For Loops, and range()

**Instructions:**  
Open your Google Colab notebook.

For each question:

1. Read it carefully.
2. Try to **guess** what the code will do before you run it.
3. Test it out in Colab.

### 1. Function with Return Value (No Variable)

**Question:**  
Make a function called add\_numbers(a, b) that **returns** the sum of a and b.  
Call your function with (4, 7) and print the result like this:

print(add\_numbers(4, 7))

**Hint:**  
*Use return a + b inside your function.*

### 2. Function with Return Value (Using a Variable)

**Question:**  
Make a function called multiply\_numbers(a, b) that **returns** the result of multiplying a and b.  
Call your function and store the answer in a variable called answer, then print answer.

**Hint:**  
*First call the function, then use answer = multiply\_numbers(...) to save the result.*

### 3. Using Returned Values in Math

**Question:**  
Make a function called double\_number(n) that **returns** n multiplied by 2.  
Call your function with 3 and 5, add the two returned results together, and print the total.  
**Hint:**  
*You can add the results like this:*

total = double\_number(3) + double\_number(5)

### 4. Basic For Loop with a String

**Question:**  
Write a for loop that prints each letter in the word "Python".

**Hint:**  
*Use for letter in "Python": to loop through each letter.*

### 5. For Loop with range(stop)

**Question:**  
Write a for loop that uses range(4) and prints the numbers it makes.

**Hint:**  
*range(4) means: 0, 1, 2, 3.*

### 6. For Loop with range(start, stop)

**Question:**  
Write a for loop that uses range(2, 7) and prints the numbers from 2 up to 6.

**Hint:**  
*The last number in range is* ***not included****.*

### 7. For Loop with range(start, stop, step)

**Question:**  
Write a for loop that uses range(0, 20, 5) and prints every 5th number starting from 0, but less than 20.

**Hint:**  
*This will print 0, 5, 10, 15.*

### 8. Mixing Return Values and Loops

**Question:**  
Make a function called square(n) that **returns** n times n.  
Then, use a for loop with range(1, 6) to print the square of each number from 1 to 5.

**Hint:**  
*Call your function inside the loop like square(i).*

### 9. Challenge – Sum of a Range

**Question:**  
Make a function called sum\_range(start, stop) that:

1. Adds all the numbers in range(start, stop).
2. Returns the total sum.  
   Call your function with (1, 6) and print the result.

**Hint:**  
*Make a variable total = 0 before the loop, then keep adding each number to it.*