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**3 - Task Description**

Create a python function that calculates the sum of two floating numbers provided by the user and then compares the total sum against the value of 100.

**Function Requirements:**

* Define Function.
* Prompt the user to enter the first number (as a float).
* Prompt the user to enter the second number (as a float).
* Calculate the sum of the two numbers.
* Compare the sum with 100:
  + If the sum is **100 or greater**, print the result and a message indicating it is “greater than 100”.
  + If the sum is **less than 100**, print the result and a message indicating it is “smaller than 100”.

Answer :

Python Code: Sum and Compare with 100

def sum\_and\_compare():

# Prompt the user to enter the first number

num1 = float(input("Enter the first number: "))

# Prompt the user to enter the second number

num2 = float(input("Enter the second number: "))

# Calculate the sum of the two numbers

total = num1 + num2

# Compare the sum with 100 and print the result

if total >= 100:

print(f"The sum is {total}, which is greater than or equal to 100.")

else:

print(f"The sum is {total}, which is smaller than 100.")

# Run the function

sum\_and\_compare()

**4 - Task Description**

Create a python function named **remove\_from\_list** that defines a list of items.  
The function must prompt the user to enter an item to remove.  
It should use an **if-else** statement to check if the item is present in the list.  
If found, the item is removed; otherwise, a message indicates that the item was not found.

**Function Requirements:**

* Define function named **remove\_from\_list**.
* Define a list with four string items (e.g. My\_list = ['Apple', 'Banana', 'Cherry', 'Data']).
* Prompt the user to enter the item they want to remove.
* Use an **if** statement to check if the item is in the list.
* If the item is in the list, use **list.remove()** and print a success message.
* Use an **else** statement to print a message indicating the item was not found.
* Print the final updated list.

Task 4 – Python Code: Remove an Item from a List

def remove\_from\_list():

# Define a list with some items

my\_list = ['Apple', 'Banana', 'Cherry', 'Data']

# Show the initial list to the user

print("Current list:", my\_list)

# Prompt the user to enter an item to remove

item = input("Enter the item you want to remove: ")

# Check if the item exists in the list

if item in my\_list:

my\_list.remove(item)

print(f"{item} has been removed successfully.")

else:

print(f"{item} was not found in the list.")

# Print the updated list

print("Updated list:", my\_list)

# Run the function

remove\_from\_list()

### ****How it works****

1. Creates a list named my\_list containing four items.
2. Displays the list to the user.
3. Asks the user to input the item they want to remove.
4. Checks if that item exists in the list using an **if** statement.
5. If found → removes it and prints a success message.
6. If not found → prints a message that it wasn’t in the list.
7. Finally, prints the updated list.

**5 - Task Description**

Create a python function named **calculate\_factorial** that calculates the factorial of a positive integer **N**.  
The factorial is the product of all positive integers less than or equal **N**.  
The function must prompt the user to enter a positive integer **N**.  
Use a **for loop** to iterate and multiply the numbers from 1 up to **N**.

**Example:**  
5! = 5 × 4 × 3 × 2 × 1 = 120

**Function Requirement**

* Define the function **calculate\_factorial**.
* Prompt the user to enter a positive integer **N**.
* Initialize a variable named result to 1.
* Use a **for loop** along with the range() function to iterate from 1 up to N.
* Inside the loop, multiply the current number by the current result.
* Print the final factorial value.

def calculate\_factorial():

# Prompt the user to enter a positive integer

n = int(input("Enter a positive integer: "))

# Check if the number is positive

if n < 0:

print("Please enter a positive integer only.")

return

# Initialize the result variable

result = 1

# Use a for loop to multiply numbers from 1 to n

for i in range(1, n + 1):

result \*= i

# Print the final factorial value

print(f"The factorial of {n} is {result}")

# Run the function

calculate\_factorial()

**How It Works**

1. Prompts the user for a positive integer n.
2. Uses a for loop from 1 to n (inclusive).
3. Multiplies each number by the cumulative result.
4. Displays the factorial value in a clean message.