-----TASK-01------

```
def body mass index(w, h):
    return w / (h ** 2)
try:
    user_weight = float(input("Enter your weight in kilograms: "))
    user height = float(input("Enter your height in meters: "))
    if user weight <= 0 or user height <= 0:
        print("Weight and height must be positive values.")
    else:
        bmi = body_mass_index(user_weight, user_height)
        print(f"Your BMI is: {bmi:.2f}")
        if bmi < 18.5:
            print("You are underweight.")
        elif 18.5 <= bmi < 24.9:
            print("You have a normal weight.")
        elif 25 <= bmi < 29.9:
            print("You are overweight.")
        else:
            print("You are obese.")
except ValueError:
    print("Please enter valid numeric values for weight and height.")
```

------OUTPUT-01------

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS Code + Code
```

-----TASK-02------

```
def addition(a, b):
    return a + b
def subtraction(a, b):
   return a - b
def multiplication(a, b):
   return a * b
def division(a, b):
   try:
       return a / b
   except ZeroDivisionError:
        return "Error: Division by zero is not allowed."
def main():
    num1 = float(input("Enter the first number: "))
    num2 = float(input("Enter the second number: "))
   print("Which operation do you want to perform?")
    for x, y in enumerate(functions):
       print(f"{x + 1}: {y}")
   while True:
        choice = int(input("Enter the number corresponding to the operatio")
        if choice == 1:
            print(f"Result: {addition(num1, num2)}")
            break
        elif choice == 2:
            print(f"Result: {subtraction(num1, num2)}")
            break
        elif choice == 3:
          print(f"Result: {multiplication(num1, num2)}")
```

------OUTPUT-02------

```
PS C:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS> python -u "c:\Users\LENOVO\Desktop\INTERNSHIP '
S TASKS\TASK-02.py"
Enter the first number: 45
Enter the second number: 0
Which operation do you want to perform?
1: ADDITION
2: SUBTRACTION
3: MULTIPLICATION
4: DIVISION
Enter the number corresponding to the operation: 4
Result: Error: Division by zero is not allowed.

PS C:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS>
```

------OUTPUT-03-------

```
● PS C:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS> python -u "c:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS\TASK-03.py"

Even number in lists are "[2, 4, 6, 8, 2, 6, 6, 4]"

Count of even numbers is "8"

PS C:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS>
```

-----TASK-04------

```
TASK-04.py > ...
1
    Write a program that returns the sum of all the elements in the given list
    def main():
         numbers = [2, 4, 6, 5, 3, 8, 2, 6, 6, 4]
     # Using the built-in sum function
11
         def sum function(x):
             return sum(x)
12
         print("Sum using built-in sum function:")
         print(sum function(numbers))
         print("=======")
     # other approach
         total = 0
         for num in numbers:
21
            total += num
         print("Sum using a loop:")
         print(total)
    if name == " main ":
        main()
```

------OUTPUT-04------

```
TASK-05.py > ...

1 '''
2 Write a program that should delete all elements in the list less than 4. u
3 in task 3.

4 '''
6 numbers = [2, 4, 6, 5, 3, 8, 2, 6, 6, 4]

7 
8 
9 new_list = [x for x in numbers if x>=4]

10 
11 
12 
13 print(new_list)
```

-----OUTPUT-05------

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS Laction Code + ∨ La
```

```
TASK-06.py > ...
1
     Write a program to take marks of 3 subjects as input by user and store them in a
     dictionary having appropriate keys. Using that dictionary calculate average and
     percentage of those marks.
     std data = {}
     subjects = ["ENGLISH", "MATH", "PHYSICS"]
     for subject in subjects:
         std_data[subject] = int(input(f"ENTER {subject} MARKS: "))
     total marks = sum(std data.values())
20
     average marks = total marks / len(subjects)
     max marks per subject = 100
     percentage = (total_marks / (max_marks_per_subject * len(subjects))) * 100
     print("\nStudent Marks:")
     for subject, marks in std data.items():
         print(f"{subject}: {marks}")
29
     print(f"\nTotal Marks: {total marks}")
     print(f"Average Marks: {average marks:.2f}")
     print(f"Percentage: {percentage:.2f}%")
33
```

-----OUTPUT-06------

```
TERMINAL
 PROBLEMS
                                                     COMMENTS
                                                                             ∑ Code + ∨ □ · · · · · ×
PS C:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS> python -u "c:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS\TA
 ENTER ENGLISH MARKS: 78
 ENTER MATH MARKS: 89
 ENTER PHYSICS MARKS: 98
 Student Marks:
 ENGLISH: 78
 MATH: 89
 PHYSICS: 98
 Total Marks: 265
 Average Marks: 88.33
 Percentage: 88.33%
 PS C:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS>
```

-----TASK-07------

```
Write a Python program to get the largest number from a list input from user. use t
list given in task 3.
#function using input from the user
def largest num(user list):
    return max(user list)
user_input = map(int,input("ENTER THE COMMA SEPERATED LIST: ").strip().split(","))
print("user output")
print(largest num(user input))
print("output of list(given)")
print(largest_num([2,4,6,5,3,8,2,6,6,4]))
```

```
PS C:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS> python -u "c:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS\TA SK-07.py"

ENTER THE COMMA SEPERATED LIST: 23,4,567,2,3,4,5,6,7,81,2,3,3 user output

567

output of list(given)

8

♣ PS C:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS>
```

-----TASK-08------

```
♦ TASK-08.py > ...
 1
     Write a python program that take 10 inputs from the user using loop and append the
      every user input value in the list and calculate the sum of all numbers.
      sum = 0
     my_list = []
      for x in range(10):
          user_data = int(input(f"ENTER THE '{x}' input : "))
          my list.append(user data)
          sum += my list[x]
      print(my_list)
      print(sum)
```

------OUTPUT-08------

```
∑ Code + ∨ □ 1
 PROBLEMS
            OUTPUT
                     DEBUG CONSOLE
                                    TERMINAL
                                               PORTS
                                                       COMMENTS
 PS C:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS> python -u "c:\Users\LENOVO\Desktop\INTERNSHIP
 SK-08.py"
 ENTER THE '0' input: 45
 ENTER THE '1' input : 3
 ENTER THE '2' input : 5
 ENTER THE '3' input : 6
 ENTER THE '4' input : 1
 ENTER THE '5' input: 23
 ENTER THE '6' input : 44
 ENTER THE '7' input : 5
 ENTER THE '8' input : 6
 ENTER THE '9' input: 76
 [45, 3, 5, 6, 1, 23, 44, 5, 6, 76]
 214

PS C:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS>
```

-----TASK-09------TASK-09------

```
Write a python program that take 5 subjects marks from the user and then check the
condition if input marks > 100 then show the output " Invalid Input", if input mark
50 but <= 100 then show " Pass" otherwise show "Fail".

'''

for x in range(1,6):
    marks = int (input(f"ENTER THE MARKS FOR SUBJECT {x}: "))

if marks > 100:
    print("IVALID MARKS!!! Marks can't be greater than 100 ")
elif marks >= 50 and marks<=100:
    print("PASS!!")
else:
    print("FAIL!!!")</pre>
```

------OUTPUT-09------

```
PS C:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS> python -u "c:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS\TA SK-09.py"

ENTER THE MARKS FOR SUBJECT 1: 23

FAIL!!!

ENTER THE MARKS FOR SUBJECT 2: 45

FAIL!!!

ENTER THE MARKS FOR SUBJECT 3: 6

FAIL!!!

ENTER THE MARKS FOR SUBJECT 4: 7199

IVALID MARKS!!! Marks can't be greater than 100

ENTER THE MARKS FOR SUBJECT 5: 78

PASS!!

PS C:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS>
```

-----TASK-10------

```
♦ TASK-10.py > ...
      10. Write a Python program to create the multiplication table (from 1 to 10) of a n
      Expected Output:
      Input a number: 6 (should be user input)
      6 \times 1 = 6
      6 \times 2 = 12
      6 \times 3 = 18
      6 \times 4 = 24
      6 \times 5 = 30
      6 \times 6 = 36
      6 \times 7 = 42
      6 \times 8 = 48
      6 \times 9 = 54
       (table should be print same as above sequence and values)
      def table generator(n):
          for x in range (1,11):
              print(f''(n) \times \{x\} = \{n*x\}'')
      num = int(input("ENTER A NUMBER: "))
      table generator(num)
```

-----OUTPUT-10------

```
OUTPUT DEBUG CONSOLE
                                      TERMINAL PORTS COMMENTS
                                                                                    ∑ Code + ∨ □ 🛍 ··· ^ ×
PS C:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS> python -u "c:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS\TA
 ENTER A NUMBER: 7
 7 \times 1 = 7
 7 \times 2 = 14
 7 \times 3 = 21
 7 \times 4 = 28
 7 \times 5 = 35
 7 \times 6 = 42
 7 \times 7 = 49
 7 \times 8 = 56
 7 \times 9 = 63
 7 \times 10 = 70
$PS C:\Users\LENOVO\Desktop\INTERNSHIP 'S TASKS>
```