Experiment 1(3)

Calculating Gross Salary of an Employee: Write a Python program to calculate the gross salary of an employee. The program should prompt the user for the basic salary (BS) and then compute the dearness allowance (DA) as 70% of BS, the travel allowance (TA) as 30% of BS, and the house rent allowance (HRA) as 10% of BS. Finally, it should calculate the gross salary as the sum of BS, DA, TA, and HRA and display the result.

Algorithm:

- 1. Start
- 2. Input: Prompt the user to enter the Basic Salary (bs).
- 3. Check for Valid Input:
 - o If the input is not a valid number, go to Step 5.
 - o If the input is valid, proceed to the next step.
- 4. Input Validation:
 - o If the Basic Salary (bs) is negative, print "Basic salary cannot be negative." and exit the function.
- 5. Calculate Allowances:
 - o Dearness Allowance (da) = Basic Salary (bs) \times 70% (or bs * 70 / 100)
 - o Travel Allowance (ta) = Basic Salary (bs) \times 30% (or bs * 30 / 100)
 - House Rent Allowance (hra) = Basic Salary (bs) \times 10% (or bs * 10 / 100)
- 6. Calculate Gross Salary:
 - Gross Salary = Basic Salary (bs) + Dearness Allowance (da) + Travel
 Allowance (ta) + House Rent Allowance (hra)
- 7. Output: Print the Gross Salary, rounded to 2 decimal places.
- 8. Exception Handling:
 - o If there is an invalid input (e.g., non-numeric data), print: "Please enter a valid number for the salary."
- 9. End

Program:

```
def grossSalary():
    bs=float(input("Enter Basic Salary:"))
    da=(bs*70)/100
    ta=(bs*30)/100
    hra=(bs*10)/100

    grossSal=bs+da+ta+hra

    print("Gross Salary:",grossSal)

grossSalary()
```

#image of program

```
def grossSalary():
    try:
        bs = float(input("Enter Basic Salary:"))
        if bs < 0:
            print("Basic salary cannot be negative.")
            return
        da = (bs * 70) / 100
        ta = (bs * 30) / 100
        hra = (bs * 10) / 100

        grossSal = bs + da + ta + hra

        print(f"Gross Salary: {grossSal:.2f}")
        except ValueError:
        print("Please enter a valid number for the basic salary.")

grossSalary()</pre>
```

Output:

Enter Basic Salary: 20000

Gross Salary: 42000.00