19CSE 100: PROBLEM SOLVING & ALGORITHMIC THINKING

FLOWGORITHM EXCERCISES

1. Accept two numbers and find the sum, difference, product, quotient and remainder.
2. Find the area of following shapes: -
   a. Circle - Radius value will be entered by the user.
   b. Square – User will enter length of side
   c. Rectangle – User enters length and breadth
   d. Rt. Angle Triangle – Input Base and Height
   e. Scalene Triangle - Lengths of three sides will be input
3. Swap two numbers
   a. Using a temporary variable.
   b. Without using a temporary variable
4. Performing following conversions: -
   a. Meter to Centimetre (1 M – 100 cm)
   b. Feet to inches (1 Feet – 12 Inches)
   c. Celsius to Fahrenheit (F = C*9/5 + 32)
   d. Kilogram to Pound (1Kg = 2.2 Pounds)
5. A company offers dearness allowance(DA) of 40% of basic pay and house rent allowance(HRA) of 10% of basic pay. Input basic pay of an employee, calculate his/her DA, HRA and Gross pay (Gross = Basic Pay+DA+HRA).
6. You have a monthly income of Rs 1100. Your monthly outgoings are
   Rent – Rs.500
   Food – Rs.300
   Electricity – Rs.40
   Phone - Rs 60
   Cable TV - Rs 30.
   Calculate the Monthly Expenses and the remainder (what's left over each month).