Assignment 2

# ECE/MAE

1.The length & breadth of a rectangle and radius of a circle are input through the keyboard. Write a program to calculate the area & perimeter of the rectangle, and the area & circumference of the circle.

2. Two numbers are input through the keyboard into two locations C and D. Write a program to interchange the contents of C and D.

3. If a five-digit number is input through the keyboard, write a program to calculate the sum of its digits. (Hint: Use the modulus operator '%')

4. If a five-digit number is input through the keyboard, write a program to reverse the number.

5. If a four-digit number is input through the keyboard, write a program to obtain the sum of the first and last digit of this number.

# CSE/MNC

6. In a town, the percentage of men is 52. The percentage of total literacy is 48. If total percentage of literate men is 35% of the total population, write a program to find the total number of illiterate men and women if the population of the town is 80,000.

7. A cashier has currency notes of denominations 10, 50 and 100. If the amount to be withdrawn is input through the keyboard in hundreds, find the total number of currency notes of each denomination the cashier will have to give to the withdrawer.

8. If the total selling price of 15 items and the total profit earned on them is input through the keyboard, write a program to find the cost price of one item.

9. If a five-digit number is input through the keyboard, write a program to print a new number by adding one to each of its digits.

For example:

If the input is 12391,

The output should be 23402.

10. An Insurance company follows these rules to calculate premium:

If a person’s health is excellent and the person is between 25 and 35 years of age and lives in a city and is male then the premium is Rs.4 per thousand and his policy amount cannot exceed Rs.2 lakhs.

If a person satisfies all the above conditions except that the sex is female, then the premium is Rs.3 per thousand and her policy amount cannot exceed Rs. 1 lakh.

If a person’s health is poor and the person is between 25 and 35 years of age and lives in a village and is male then the premium amount is Rs. 6 per thousand and his policy cannot exceed Rs. cannot exceed Rs. 10,000

In all other cases, the person is not insured.

Write a program to output whether a person should be insured or not, his/her premium rate and maximum policy amount for which he/she can be insured.