- 1. Enter 2 numbers and find whether first number is divisor of second or not.
- 2. Enter 2 numbers and find whether first is a factor of second or not.
- 3. Enter a number and find whether its even or odd.
- 4. Write a program to enter 2 numbers and print the larger in them.
- 5. Enter two numbers and find smaller in them.
- 6. Enter 3 numbers and find largest and smallest in them.
- 7. Any year is entered through the keyboard, write a program to determine whether the year is leap or not. (A leap year is divided by 4, and not divisible by 100, with exception of an year divisible by 400, e.g., 1700, 1800, 1900 are NOT leap, but 2000 is because of divisibility of 400)
- 8. If the three sides of a triangle are entered through the keyboard, write a program to check whether the triangle is valid or not. The triangle is valid if the sum of two sides is greater than the largest of the three sides.
- 9. In a company, worker efficiency is determined on the basis of the time required for a worker to complete a particular job. If the time taken by the worker is between 2 3 hours, then the worker is said to be highly efficient. If the time required by the worker is between 3 4 hours, then the worker is ordered to improve speed. If the time taken is between 4 5 hours, the worker is given training to improve his speed, and if the time taken by the worker is more than 5 hours, then the worker has to leave the company. If the time taken by the worker is input through the keyboard, find the efficiency of the worker.
- 10. A library charges a fine for every book returned late. For first 5 days the fine is 50 paise, for 6-10 days fine is one rupee and above 10 days fine is 5 rupees. If you return the book after 30 days your membership will be cancelled. Write a program to accept the number of days the member is late to return the book and display the fine or the appropriate message.
- 11. An Insurance company follows following rules to calculate premium.
  - (1) 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 a male then the premium is Rs. 4 per thousand and his policy amount cannot exceed Rs. 2 lakhs.
  - (2) 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.
  - (3) 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 a male then the premium is Rs. 6 per thousand and his policy cannot exceed Rs. 10,000.
  - (4) In all other cases the person is not insured.

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