Practical 3: Decision control statements

1. Write a program to check whether input character is lowercase character, uppercase character, digits or special symbols.
2. Write a program to input a number and display which day of the week on the basis of input number. Example 1 is Sunday, 2 is Monday
3. Write a program to find the number given by user is exactly divisible by 2, 3 and 6 or not.
4. Write a program to find maximum of 3 numbers using else if ladder.
5. Write a program to find maximum of 4 numbers using else if ladder.
6. Write a program to find maximum of 3 numbers using nested if else.
7. Write a program to find maximum of 4 numbers using nested if else.
8. An electricity board charges according to the following rate
   For the first 100 units -------- Rs 40 per unit
   For the next 200 units -------- Rs 50 per unit
   For beyond 300 units --------- Rs 60 per unit
   All users are also charged meter charge, which is equal to Rs. 50. Write a program to read number of units consumed and print the total charge.
9. An electricity board charges according to the following rates
   For the first 20 units -------- Rs 80
   For the next 80 units -------- Rs 7.5 per unit
   For next 100 units ----------- Rs 8.5 per unit
   For beyond 200 units ------- Rs 9.5 per unit
   All users are also charged meter charge, which is equal to Rs. 50. Also tax = 5% of charge. Write a program to read number of units consumed and print the total charge.
10. Write a program that reads marks of student in seven subjects.
    Calculate the percentage if the student has achieved greater than 45 in   each subject and use these conditions
    Percentage greater than equals to 80 is distinction
    Percentage from 60 to 79 is first division
    Percentage from 45 to 59 is second division
11. A company does insurance of the driver in following cases
    a. If the driver is married
    b. If the driver is unmarried male and above 30 years of age
    c. If the driver is unmarried female and above 25 years of age
 - Write the program without using any logical operators

12. A company does insurance of the driver in following cases
   a. If the driver is married
   b. If the driver is unmarried male and above 30 years of age
   c. If the driver is unmarried female and above 25 years of age
- Write the program using logical operators
13. Write a program to read a character from keyboard and convert the input character into uppercase if it is lowercase and vice versa.
14. Write a program to swap two input numbers.
15. A year is entered through the keyboard, write a program to determine whether it is leap year or not.
    (Hint: for century year it should be divisible by 400 and for non-century year it should be divisible by 4)