P01 Input , Output & Conditionals(If & Else)

1	The marks obtained by a student in 5 different subject are input through keyboard. The student gets a division as per the following rules: Percentage above or equal to 60 → First Division Percentage between 50 and 59 →Second Division Percentage between 40 and 49 → Third Division Percentage less than 40 → Fail Write a C++ program to take input of marks and display the division obtained by the students.
2	A company decides to pay bonus to its employee as per the following rules: Years of service more than 7 → Rs. 5000 Years of service between 4 & 6→ Rs. 3000 Years of service between 1 & 3→ Rs. 1000 Years of service less than 1 → Not eligible for bonus If current year & year of joining are input through the keyboard, write a C program to calculate the bonus received by an employee.
3	The workers in a factory are paid according to the following rules: Their regular working hours are 40, for which they are paid at the rate of Rs. 2.50 per hour. If overtime hours are between 1 & 5 → Rs. 7.00 per hour If overtime hours are between 6 & 10 → Rs. 8.50 per hour If overtime hours are above 10→ Rs. 12.00 per hour If number of hours worked are input by user, write a C++ program to find out the payment made to the employee.
4	Write a program to find largest among three variables.
5	If Principal, number of years and rate of interest is taken as input from the user, write a C++ program for calculating the simple interest. (si=p*r*n/100)
6	The basic salary of an employee is entered by user. If the dearness allowance is 40% of basic salary and house rent allowance is 20% of basic, Medical allowance is 5% of basic, write a C++ Program to calculate gross salary.
7	The distance between two cities (in Km) is entered by user. Write a C Program to convert & print this distance in meters, feet, inches and centimetres.

8	The population of a city in India at the beginning of 2013 is entered by user. The population changes as per the following pattern: - at the end of 2014 - 10% increase - at the end of 2015 – 10% decrease - at the end of 2016 – 11.23 % increase - at the end of 2017 – remains constant - at the end of 2018 – decreases by 4.2% Write a C++ Program to calculate the population at the end of 2018
9	The temperature of the city is entered by user in Fahrenheit. Write a C++ Program to convert this temperature into centigrade degrees.
10	A mathematics student has three equations as follows: z+c=a^2+2ab 2ac=b^2-x-2z y= z+5x-2yb+k Values of a,b,c,& y are entered by user. Write a C++ Program to evaluate k.
11	The year of joining of an employee and the current year are entered by user. If the years of service are greater than 3 then the employee is given a bonus of Rs. 5000. Write a C++ Program to print the bonus only if the years of service are greater than 3.
12	The workers in the factory are paid according to the following rules. Their regular working hours are 48 in a week, for which they are paid at the rate of 50 per hour. For working overtime (above 48 hours), the payment will be made as under: -If overtime hours are between 1 & 5 → Rs. 70 per hour - If overtime hours are between 6 & 10 → Rs. 85 per hour - If overtime hours are above 10→ Rs. 120 per hour. If the number of hours worked are entered by user, write a C++ Program to find out the payment made to the employee.
13	A bank pays interest in the following manner: If the amount is more than 100000, then interest rate = 12% If the amount is >=60000 & <100000, then interest rate = 10% If the amount is >=30000 & <60000, then interest rate=8% If the amount is <30000, then interest rate= 7.2% If the amount is entered by user, write a C++ Program to calculate the interest the customer would get.

14	If temperature of a city is entered by user in Fahrenheit degrees, determine how the atmosphere of the city is according to the following rules: - If temperature is above 40 degrees → very hot - If temperature is <40 & >=37 → Hot - If temperature is >=34 & <37 → Warm - If temperature is <34 → cool
15	Write a C Program to check whether year entered by user is leap year or not.
16	Write a C Program to display a month corresponding to a number entered by user. For example, 1→January 2→February etc..