

C++ Lab Assignment 4

Basic C++ Coding

Date of Submission: 20/06/2020

1. Write a program which accepts days as integer and display total number of years, months and days in it. For example: If user input as 856 days the output should be 2 years 4 months 6 days.
2. Write a program that takes length as input in feet and inches. The program should then convert the lengths in centimetres and display it on screen. Assume that the given lengths in feet and inches are integers.
Based on the problem, you need to design an algorithm as follows:
 1. Get the length in feet and inches.
 2. Convert the length into total inches.
 3. Convert total inches into centimetres.
 4. Output centimetres.To calculate the equivalent length in centimetres, you need to multiply the total inches by 2.54. Instead of using the value 2.54 directly in the program, you will declare this value as a named constant. Similarly, to find the total inches, you need to multiply the feet by 12 and add the inches. Instead of using 12 directly in the program, you will also declare this value as a named constant. Using a named constant makes it easier to modify the program later.
3. Any integer is input by the user. Write a program to find out whether it is an odd number or even number.
4. Write a program to calculate the total expenses. Quantity and price per item are input by the user and discount of 10% is offered if the expense is more than 5000.
5. Write a program to determine whether the seller has made profit or incurred loss. Also determine how much profit he made or loss he incurred. Cost price and selling price of an item is input by the user.
6. If the ages of Ram, Sulabh and Ajay are input by the user, write a program to determine the youngest of the three.
7. Write a program to check whether a triangle is valid or not, when the three angles of the triangle are entered by the user. A triangle is valid if the sum of all the three angles is equal to 180 degrees.
8. Any year is input by the user. Write a program to determine whether the year is a leap year or not.
9. In a company an employee is paid as under:
If his basic salary is less than Rs. 1500, then HRA = 10% of basic salary and DA = 90% of basic salary.
If his salary is either equal to or above Rs. 1500, then HRA = Rs. 500 and DA = 98% of basic salary.
If the employee's salary is input by the user write a program to find his gross salary.
10. Write a program to calculate the monthly telephone bills as per the following rule:
Minimum Rs. 200 for up to 100 calls.
Plus Rs. 0.60 per call for next 50 calls.
Plus Rs. 0.50 per call for next 50 calls.
Plus Rs. 0.40 per call for any call beyond 200 calls.