

Assignment 2

Q1. Write a menu driven program to calculate volume of the box($\text{length} * \text{width} * \text{height}$). Provide parameterless, parameterized(with 3 parameters) and single parameterized constructor. Create the local objects in respective case and call the function to calculate area.

Menu options ->

1. Calculate Volume with default values
2. Calculate Volume with length,breadth and height with same value
3. Calculate Volume with different length,breadth and height values.

Q2. Imagine a tollbooth at a bridge. Cars passing by the booth are expected to pay a fifty-cent toll. Mostly they do, but sometimes a car goes by without paying.

The tollbooth keeps track of the number of cars that have gone by and of the total amount of money collected. Model this tollbooth with a class called tollbooth.

The two data items are a type unsigned int to hold the total number of cars, and a type double to hold the total amount of money collected.

A constructor initializes all data members to 0. A member function called `payingCar()` increments the car total and adds 0.50 to the cash total. An other function, called `nopayCar()` increments the car total but adds nothing to the cash total. Finally, a member function called `printOnConsole()` displays the two totals and number of paying as well as non paying cars total.