**Programming Assignment 3**

The cost of renting a room at a hotel is, say $100.00 per night. For special occasions, such as a wedding or conference, the hotel offers a special discount as follows: If the number of rooms booked is at least 10, the discount is 10%; at least 20, the discount is 20%; and at least 30, the discount is 30%. Also if rooms are booked for at least three days, then there is an additional 5% discount. Write a program that prompts the user to enter the cost of renting one room, the number of rooms booked, the number of days the rooms are booked, and the sales tax (as a percent). The program outputs the cost of renting one room, the discount on each room as a percent, the number of rooms booked, the number of days the rooms are booked, the total cost of the rooms, the sales tax, and the total billing amount. Your program must use appropriate named constants to store special values such as various discounts.

Programs with build errors are not accepted.

Using Blackboard,

* **Navigate to** the assignment
* **attach your C++ source file** (.cpp file)
* **submit** your assignment.

|  | **Scorecard Program 3** |  |
| --- | --- | --- |
|  | **Description** | **Points** |
| **Documentation (10%)** | program file name | 2 |
|  | brief description of assignment | 2 |
|  | name of the author | 2 |
|  | course title and meeting time | 2 |
|  | assignment number and due date | 2 |
| **Formatting (10%)** | Use proper indentation in main function | 4 |
|  | Use proper indentation in if and/or switch statements | 6 |
| **Technique (40%)** | Identifiers have meaningful names | 4 |
|  | Appropriate constant declarations | 5 |
|  | Appropriate variable declarations | 10 |
|  | User prompt for each required input item | 4 |
|  | Read each required input item | 4 |
|  | Statements are organized by input/process/output | 10 |
| **Output (40%)** | Calculations are correct | 20 |
|  | Program runs without modification | 5 |
|  | Output display as specified in instructions | 7 |
|  | Dollar amounts displayed with 2 decimals | 4 |
|  | Output of all items is properly labeled | 7 |
|  | **Late (5% per day)** |  |
|  | **TOTAL** | 100 |

**Late Penalties:**

* 5% of the grade is deducted for each daythe assignment is overdue**.**
* Assignments more than 10 days late are not accepted.