**Programming Assignment 5**

Write a program that outputs inflation rates for two successive years and whether the inflation is increasing or decreasing. Ask the user to input the current price of an item and its price one year and two years ago. To calculate the inflation rate for a year, subtract the price of the item for that year from the price of the item one year ago and then divide the result by the price a year ago. Your program must contain at least the following functions: a function to get the input, a function to calculate the results, and a function to output the results. Use appropriate parameters to pass the information in and out of the function. Do not use any global variables..

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 5** |  |
| --- | --- | --- |
|  | **Description** | **Points** |
| **Documentation (10%)** | program file name | 1 |
|  | brief description of assignment | 1 |
|  | name of the author | 1 |
|  | course title and meeting time | 1 |
|  | assignment number and due date | 1 |
|  | each function has a brief description | 5 |
| **Formatting (10%)** | Use proper indentation in main function | 1 |
|  | Use proper indentation in if /switch statements | 2 |
|  | Use proper indentation in while/do-while/for statements | 2 |
|  | Use proper indentation for function declarations | 5 |
| **Technique (40%)** | Identifiers have meaningful names | 2 |
|  | Appropriate variable declarations (no global variables) | 2 |
|  | function for reading the prices | 9 |
|  | function for calculating the inflation rates | 8 |
|  | function for displaying message for increasing/decreasing inflation rate | 4 |
|  | Do not accept a number less than or equal to zero for the prices | 5 |
|  | proper use of parameters | 5 |
|  | main function consists of only function calls **NOTE:** there should be no loops or if statements in the main | 5 |
| **Output (40%)** | Calculations are correct | 15 |
|  | Program runs without modification | 5 |
|  | Error message for invalid price | 10 |
|  | Output message for increasing/decreasing inflation rate | 10 |
|  | **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.