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CSCI 201 Section 05

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**Homework 1: Test Report**

The purpose of this program is to ask the diameter and price of Large pizza and Small pizza to a consumer and then find out which one is better to buy. To know which pizza is better the program finds the cost per square inches of both pizza and compare them. After comparing, the pizza that has low cost per square inches is better to buy.

The program contains following files:

main.cpp

HomeworkScript1.txt

Homework1.rap

a.out

The entry point of the program is: main.cpp

The command to compile it is: g++ main.cpp

After successfully compiling the program, run ./a.out or ./Homework1 to execute the program. To use the program the user should be aware of following data inputs.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Valid Input** | **Operation** | **Input** | **example** | **Error/reason** |
|  | Diameter of small pizza | Enter the diameter of small pizza | 10 | No error |
|  | Price of small pizza | Enter the Price of small pizza | 7.5 | No error |
|  | Diameter of large pizza | Enter the diameter of large pizza | 13 | No error |
|  | Price of large pizza | Enter the Price of large pizza | 14.75 | No error |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Invalid Input** | **Operation** | **Input** | **Example** | **Error/reason** |
|  | Diameter of small pizza | Enter the diameter of small pizza | a | Error: Float Numbers are only accepted not strings. |
|  | Price of small pizza | Enter the Price of small pizza | -10 | Error: No negative value accepted. |
|  | Diameter of large pizza | Enter the diameter of large pizza | 0 | Error: Diameter cannot be zero. |
|  | Price of large pizza | Enter the Price of large pizza | - | Error: No null value accepted. |

**Test report**

**Pretest vs post test**

**Test 1:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Diameter** | **Price** | **Pre. Test: Price per sq. inches** | **Posttest: price per sq. inches** | **Result** | **Action**  **needed** |
| **Small Pizza** | **8** | **5** | **0.10** | **0.10** | **OK** | **No** |
| **Large pizza** | **10** | **8** | **0.11** | **0.11** | **OK** | **No** |

**Output: Small one is better to buy.**

**Test 2:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Diameter** | **Price** | **Pre. Test: Price per sq. inches** | **Posttest: price per sq. inches** | **Result** | **Action**  **needed** |
| **Small Pizza** | **12** | **10** | **0.09** | **0.09** | **OK** | **No** |
| **Large pizza** | **18** | **11** | **0.05** | **0.05** | **OK** | **No** |

**Output: Large one is better to buy.**

**Test 3:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Diameter** | **Price** | **Pre. Test: Price per sq. inches** | **Posttest: price per sq. inches** | **Result** | **Action**  **needed** |
| **Small Pizza** | **10** | **5** | **0.07** | **0.07** | **OK** | **No** |
| **Large pizza** | **15** | **8** | **0.05** | **0.05** | **OK** | **No** |

**Output: Large one is better to buy.**