**University of Michigan – Dearborn**

**CIS 150 – Computer Science 1**

**Lab# 6**

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# Question 1

## Test Cases

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test # | Valid / Invalid Data | Description of test | Input Value | Actual Output | Test Pass / Fail |
| 1 | VALID | See if input values work correctly | userN = 0 | Sum = 0  Average = 0 | PASS |
| 2 | VALID | See if input values work correctly | userN = 1 | Sum = 1  Average = 0.5 | PASS |
| 3 | VALID | See if input values work correctly | userN = 27 | Sum = 378  Average = 13.5 | PASS |
| 4 | VALID | See if input values work correctly | userN = 101 | Sum = 5151  Average = 50.5 | PASS |
| 5 | VALID | Test exit value | userN = -99 | “you have deiced to exit program…” | PASS |

## Source Code – see LAB6Q1.cpp

## Screenshots

TEST 1

![A screenshot of a cell phone

Description automatically generated]()

TEST 2

![A screenshot of a cell phone

Description automatically generated]()

TEST 3

![A screenshot of a cell phone

Description automatically generated]()

TEST 4

![A screenshot of a computer

Description automatically generated]()

TEST 5

![A screenshot of a cell phone

Description automatically generated]()

# Question 2

## Test Cases

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test # | Valid / Invalid Data | Description of test | Input Value | Actual Output | Test Pass / Fail |
| 1 | VALID | Test character/wdth/hgt of ‘C’ output | userChar = #  width = 4  height = 5 | See screenshot | PASS |
| 2 | VALID | Test character/wdth/hgt of ‘C’ output | userChar = %  width = 6  height = 7 | See screenshot | PASS |
| 3 | VALID | Test character/wdth/hgt of ‘C’ output | userChar = ^  width = 9  height = 9 | See screenshot | PASS |
| 4 | VALID | Test character/wdth/hgt of ‘C’ output | userChar = !  width = 12  height = 12 | See screenshot | PASS |
| 5 | VALID | Test exit value | Option B | “you have selected to exit…” | PASS |

## Source Code – see LAB6Q2.cpp

## Screenshots

TEST 1

![A screenshot of a cell phone

Description automatically generated]()

TEST 2

![A screenshot of a cell phone

Description automatically generated]()

TEST 3

![A screenshot of a cell phone

Description automatically generated]()

TEST 4

![A screenshot of a cell phone

Description automatically generated]()

TEST 5![A screenshot of a cell phone

Description automatically generated]()

# Question 3

## Test Cases

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test # | Valid / Invalid Data | Description of test | Input Value | Actual Output | Test Pass / Fail |
| 1 | VALID |  |  |  |  |
| 2 | VALID |  |  |  |  |
| 3 | VALID |  |  |  |  |
| 4 | VALID |  |  |  |  |

## Source Code – see LAB6Q3.cpp

## Screenshots

TEST 1

TEST 2

TEST 3

TEST 4