Program Design Document

Project Title and Due Date\_Ice Cream Math, due Aug 30, 2019

A screenshot of a cell phone

Description automatically generated

*Answer these questions for the current upcoming project. In order to get credit for the programming part of the project, you need to complete this document beforehand. This design document is worth 20 points.*

This would be for the following example:

You need to write a program that can take 2 different integer inputs and add them together (don’t worry about bad data being input). Once added, you should display the following: “The sum of [input one] and [input two] is [sum of inputs]”.

1. What data do you need to represent for this problem? Illustrate your answer with a few concrete examples for this program.

First input: string

Second input: string

First value: int

Second value: int

Sum: int

examples

* First input: “5”
* Second value: 6

1. Describe in your own words what problem your program is supposed to solve. If your program takes command line parameters, give the program signature. For any functions that you write for your program, describe what they compute and their signatures.

No command line parameters

A main function

Ask the user to input two integers and then find and print the sum of them. Output should look like the example in #3.

1. Show how your program will work and what you will produce given some example inputs. Do the same for any functions you write.

The sum of 5 and 6 is 11

I’m going to ask the user to input two integers (one at a time) and then convert them both numeric values. Once converted, I’ll print the sum to the console.

1. Write a high-level pseudocode outline of your program based on steps 1 and 2. You do not need to fill in all the details at this point.
2. Ask user to input first number
3. Ask user to input second number
4. Convert first and second numbers to integers
5. Compute the sum of the first and second integers
6. Print #4
7. Turn the examples you used in your answers above into assertions that **could** be used to test your program.
8. First number is a non-empty string that can be converted to an integer
9. Second number is a non-empty string that can be converted to an integer
10. If first number is 5 and second number is 6, then the sum is 11