Design Document and Test Plan

Name of team members who collaborated on the design and test plan:

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Name of programming for which you submit this document: **Patient Charges**

# Pseudocode

*(See Ch. 1.6 in our textbook for an example of how to write detailed pseudocode)*

create variables stay (char), numDays (int), roomRate (double), chargeService (double), chargeMeds (double), count (int)

Print program opening statement

In while loop:

prompt user to input whether they are inpatient or outpatient and store user input

* if either I or O entered by patient count is incremented by 1

depending on inpatient or outpatient, prompt user for necessary information and store data

call validateUserInput, inpatients have 4 parameters for the function, outpatients only have 2

if any data entered by user is less than 0, prompt user to re-enter data and store new input

call to calcTotalCharges

print total to screen

Create Makefile

# Test Plan

*(See Ch. 5.13 in our textbook for an example of how to write a test plan)*

| **Test #** | **Purpose** | **Input** | **Expected Output** |
| --- | --- | --- | --- |
| 1 | To make sure the correct output is shown | I  10  5  5  5.01 | Your  total  hospital  bills  is  $60.01 |
| 2 | To make sure the correct output is shown | I  10  10  5  5.01 | Your  total  hospital  bills  is  $110.01 |
| 3 | To make sure the correct output is shown | O  5  5.01 | Your  total  hospital  bills  is  $10.01 |
| 4 | To make sure the correct output is shown | Z  O  5  5.01 | Please enter I for in  -  patient or O for out  -  patient:  Your  total  hospital  bills  is  $10.01 |
| 5 | To make sure the correct output is shown | Q  O  5  5.01 | Please enter I for in  -  patient or O for out  -  patient:  Your  total  hospital  bills  is  $10.01 |
| … | *(Feel free to add more test cases)* |  |  |