

# Test Plan

## **I. Introduction:**

### **A. Overview:**

This program prompts the user for an amount of change and calculates the minimum number of coins required to give the user change. It will continue to prompt the user so long as an invalid change is entered.

### **B. Scope:**

The test will be conducted to test if it can properly calculate the minimum number of coins required to give the user change. It will also examine if the software will continue to prompt the user for a numerical value greater than 0 if the entered input is not.

## **II. Test Methodology:**

### **A. Success Criteria:**

- The program successfully prompts the user for an input.
- The program successfully rounds the input to the nearest tenth.
- The program successfully converts the input to cents and an integer.
- The program demands a numerical input if it encounters an error value.
- If the input is less than or equal to 0, the program demands a valid input.
- The program will repeatedly prompt the user for valid input if it's invalid.
- The program calculates the correct number of quarters.
- The program calculates the correct number of dimes.
- The program calculates the correct number of nickels.
- The program calculates the correct number of pennies.
- The program calculates the correct sum of all the coins.

- *Integrated with all features: The program successfully prints the sum concatenated with a string.*

#### **B. Test Levels:**

The test will be done on two levels: Unit testing where each component of the success criteria will be tested except for the last one. In addition, integrated testing will be carried out for the last criteria as all the features of the program will be combined and tested at once for this criteria.

### **III. Resource and Environmental Needs:**

#### **A. Testing Tools:**

A computer is all that's required for the purpose of this test.

#### **B. Test Environment:**

The program is to be conducted and tested out on Python IDLE version 3.7.4 or any compatible platforms. Its minimum hardware requirement is the same as that of the platform's minimum requirement.