

## Exercise2

### Exercise2A(C program), Exercise2B(C++ program), Exercise3C(Java Program)

#### Problem: Change Machine Program

Write a program(console application) that takes as input any change expressed in cents. It should then compute the number of half-dollars, quarters, dimes, nickels, and pennies to be returned, returning as much as possible the number of half-dollars, then quarters, then dimes, nickels, and pennies.

Half-dollar = 50 cents, Quarter = 25 cents, Dime= 10 cents, Nickel = 5 cents

Example Output:

```
Change Machine
Enter change in cents: 583
You have entered 583 cents.
The number of half-dollar/s to be returned is 11.
The number of quarter/s to be returned is 1.
The number of dime/s to be returned is 0.
The number of nickel/s to be returned is 1.
The number of penny/ies to be returned is 3.
```

Requirement:

1. Define the problem.

2. Develop an algorithm.

2a. pseudocode

2b. flowchart

3. Write the source codes.

3a. C

3b. C++

3c. Java