

## Problem Set 1 Exercise #06: Coins

**Reference:** Lecture 2 notes

**Learning objectives:** Logical thinking

**Estimated completion time:** 20 minutes

### Problem statement:

You are given these coin denominations: 1¢, 5¢, 10¢, 20¢, 50¢, and \$1. Write a program **coins.c** to find out the smallest number of coins needed for a given amount. You do not need to list out what coins are used.

For example, for 375 cents, 6 coins are needed.

### Sample run #1:

```
Enter amount in cents: 300  
Minimum number of coins needed: 3
```

### Sample run #2:

```
Enter amount in cents: 375  
Minimum number of coins needed: 6
```

### Sample run #3:

```
Enter amount in cents: 543  
Minimum number of coins needed: 10
```