Greedy Project

Success Criteria:

- Has to input the user's change
- Has to calculate the number of coins the user need
- Has to calculate the number of coins by dividing the change by each coin to get 0 remainders at the end
- Has to output the correct number of coins the user need
- Has to store the remainder when calculating each coin
- Has to store the number of coins during the steps taken

Test Plan:

Input	Expected Output	Actual Output	Evaluation
2.35	You have 10 coins	You have 10 coins	Success
0.00	You have 0 coins	You have 0 coins	Success
-1.00	You have -4 coins	You have -4 coins	Success
100000000.00	You have 400000000 coins	You have 400000000 coins	Success
0.01	You have 1 coin	You have 1 coin	Success
0,01	Error	Error	Success
a	Error	Error	Success
0.0005	You have 0 coins	You have 0 coins	Success
18.63	You have 78 coins	You have 78 coins	Success

Flow Chart:

```
                          ┌──────────────────┐              ┌──────────────────┐
                          │ coin = (change - │              │ change =         │
                          │ remainder) / 5   │─────────────▶│ remainder        │
  ┌───────────┐           └──────────────────┘              └──────────────────┘
  │   Start   │                    ▲                                 │
  └───────────┘           ┌──────────────────┐              ┌──────────────────┐
        │                 │ remainder =      │              │ remainder =      │
        ▼                 │ change % 5       │              │ change % 1       │
  ┌──────────────┐        └──────────────────┘              └──────────────────┘
  │ input change │                 ▲                                 │
  │ from user    │        ┌──────────────────┐              ┌──────────────────┐
  └──────────────┘        │ change =         │              │ coin = (change - │
        │                 │ remainder        │              │ remainder) / 1   │
        ▼                 └──────────────────┘              └──────────────────┘
  ┌──────────────┐                 ▲                                 │
  │ set coin = 0 │        ┌──────────────────┐              ┌──────────────────┐
  └──────────────┘        │ coin = (change - │              │ change coin to an│
        │                 │ remainder) / 10  │              │ integer then a   │
        ▼                 └──────────────────┘              │ string           │
  ┌──────────────┐                 ▲                        └──────────────────┘
  │ change =     │        ┌──────────────────┐                       │
  │ change * 100 │        │ remainder =      │              ┌──────────────────┐
  └──────────────┘        │ change % 10      │              │ print "You have" │
        │                 └──────────────────┘              │ +coin + "coins"  │
        ▼                          ▲                        └──────────────────┘
  ┌──────────────┐        ┌──────────────────┐                       │
  │ remainder =  │        │ change =         │              ┌───────────┐
  │ change % 25  │        │ remainder        │              │    End    │
  └──────────────┘        └──────────────────┘              └───────────┘
        │                          ▲
        ▼                          │
  ┌──────────────┐        ┌──────────────────┐
  │ coin =       │        │ change =         │
  │ (change -    │───────▶│ remainder        │
  │ remainder)/25│        └──────────────────┘
  └──────────────┘
```