

Sameer Ali – Group 6

Task IV – 29th Oct 2018

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

Example 1: For 375 cents, 6 coins are needed.

Example 2: For 543 cents, 10 coins are needed.

Solution:

Start

var coinDenomin = [100, 50, 20, 10, 5, 1]

var numOfCoins = 0, givenAmount, dividNumOfCoins, multiplyNumOfCoins;

Input givenAmount

for i=0; i <= coinDenomin.Length; i++

 multiplyNumOfCoins = dividNumOfCoins * coinDenomin[i]

 givenAmount = givenAmount - multiplyNumOfCoins

 numOfCoins += dividNumOfCoins

end-for

Print numOfCoins

End

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Flowchart

