***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, multplyNumOfCoins;

**Input** givenAmount

**for** i=0; i <= coinDenomin.Linght; i++

dividNumOfCoins = ABS(givenAmount / coinDenomin[i])

multplyNumOfCoins = dividNumOfCoins \* coinDenomin[i]

givenAmount = givenAmount - multplyNumOfCoins

numOfCoins += dividNumOfCoins

**end-for**

**Print** numOfCoins

**End**

***Flowchart***

**START**

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

**numOfCoins = 0**

**dividNumOfCoins = ABS (givenAmount / coinDenomin[i])**

**multplyNumOfCoins = dividNumOfCoins \* coinDenomin[i]**

**givenAmount = givenAmount - multplyNumOfCoins**

**numOfCoins += dividNumOfCoins**

**i <= coinDenomin.Lenght**

**No**

**Yes**

**END**

**PRINT numOfCoins**

**i++**

**i = 0**

**INPUT givenAmount**