**GREEDY ALGORITHMS**

PROBLEM 1:

1-G COIN PROBLEM

AIM:

Write a program to take value V and  we want to make change for V Rs, and we have infinite supply of each of the denominations in Indian currency, i.e., we have infinite supply of { 1, 2, 5, 10, 20, 50, 100, 500, 1000} valued coins/notes, what is the minimum number of coins and/or notes needed to make the change.

CODE:  
#include<stdio.h>

#include<string.h>

int main()

{ int arr[]= {1000,500,100,50,20,10,5,2,1};

int x;

scanf("%d",&x);

int count = 0;

int a = (sizeof(arr) / sizeof arr[0]);

for(int i=0;i<a;i++){

while(x >= arr[i])

{

x= x-arr[i];

count++;

}

}printf("%d",count);

}

INPUT:

49

OUTPUT:

5