***Coin Change:***

#include<stdio.h>

int main()

{

int coin[100],n,a,arr[1000],temp;

printf("Enter the coin number:\n");

scanf("%d",&n);

for(int i=1;i<=n;i++)

{

scanf("%d",&coin[i]);

}

printf("Enter the Amount:\n");

scanf("%d",&a);

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

{

if(i==0)

{

arr[i]=1;

}

else

{

arr[i]=0;

}

}

for(int i=1;i<=n;i++)

{

for(int j=0;j<=a;j++)

{

if(arr[j]!=0)

{

arr[j+coin[i]]=arr[j]+arr[j+coin[i]];

}

}

}

printf("\nNUMBER OF WAY TO MAKE %d IS : %d\n",a,arr[a]);

return 0;

}