

**Minimum number of coins needed to make value K (one coin one use) :**

```
#include<bits/stdc++.h>
using namespace std;
int coin[5]={1,2,5,3,7};
int k=10;
int dp[11];
int main()
{
    memset(dp,-1,sizeof(dp));
    dp[0]=0;
    for(int i=0;i<5;i++)
    {
        for(int j=10;j>=coin[i];j--)
        {
            if(dp[j-coin[i]]!=-1)
            {
                if(dp[j]==-1)
                    dp[j]=1+dp[j-coin[i]];
                else
                    dp[j]=min(dp[j],1+dp[j-coin[i]]); // for maximum coin= max(dp[j],+dp[j-coin[i]]);
            }
        }
    }
}
```