**Problem 1**

KnapSack (v, w, n, W)

for w = 0 to W

V[0,w] ← 0;

for i = 1 to n

for w = 0 to W

if(w[i] <= w)

V[i,w] ← max{V[i – 1, w], v[i] + V[i-1,w-w[i]]};

Keep[i, w] ← true;

else

V[i,w] ← V[i-1,w];

Keep[i, w] ← false;

for i = n down to 1

if(Keep[i, w] == true)

output: i >> W – w[i];

Retun V[n,W]

**Problem 2**

Time complexity: O(nW)

No. Programming approach of solving Knapsack problem has not changed the exponential time complexity of the original brute force solution.