public class KnapsackTabulation {

public static int KnapsackTabulation(int[] weight,int[] profit,int W,int n){

int[][]dp=new int[n+1][W+1];

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

for(int w=1;w <= W;w++) {

if(weight[i-1] <= W){

dp[i][W]=Math.max(profit[i-1]+dp[i-1][W-weight[i-1]], dp[i-1][W]);

} else {

dp[i][W]=dp[i-1][W];

}

}

}

return dp[n][W];

}

public static void main(String[] args) {

int w1=4;

int[] profit1={1,2,3};

int[] weight1={4,5,1};

int n1=profit1.length;

System.out.println("output(Tabulation):"+ KnapsackTabulation(weight1, profit1, w1, n1));

}

}