

## Code:

```
J prac3.java > ...
1  class Knapsack {
2
3      static int max(int a, int b) { return (a > b) ? a : b; }
4
5      static int knapSack(int W, int wt[], int val[], int n)
6      {
7          if (n == 0 || W == 0)
8              return 0;
9
10         if (wt[n - 1] > W)
11             return knapSack(W, wt, val, n - 1);
12
13         else
14             return max(val[n - 1] + knapSack(W - wt[n - 1], wt, val, n - 1), knapSack(W, wt, val, n - 1));
15     }
16
17     Run | Debug
18     public static void main(String args[])
19     {
20         int profit[] = new int[] { 60, 100, 120 };
21         int weight[] = new int[] { 10, 20, 30 };
22         int W = 50;
23         int n = profit.length;
24         System.out.println("Profit :- " + knapSack(W, weight, profit, n));
25     }
}
```

## Output:

Profit :- 220