

```

#include<stdio.h>

int max(int a, int b) { return (a > b) ? a : b; }

int knapSack(int W, int wt[], int val[], int n) {
    int i, w;
    int K[n+1][W+1];

    for (i = 0; i <= n; i++) {
        for (w = 0; w <= W; w++) {
            if (i==0 || w==0)
                K[i][w] = 0;
            else if (wt[i-1] <= w)
                K[i][w] = max(val[i-1] + K[i-1][w-wt[i-1]], K[i-1][w]);
            else
                K[i][w] = K[i-1][w];
        }
    }

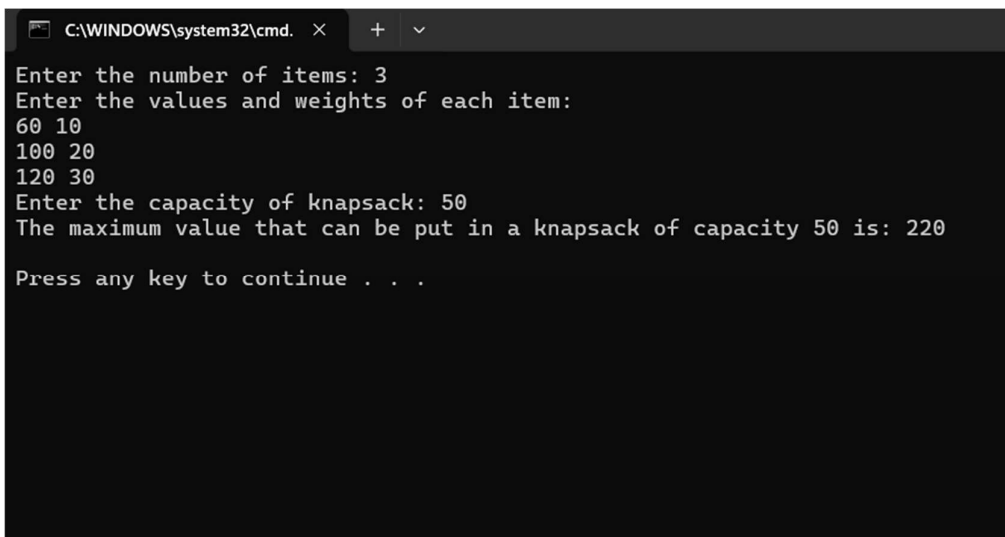
    return K[n][W];
}

int main() {
    int val[100], wt[100], W, n, i;
    printf("Enter the number of items: ");
    scanf("%d", &n);
    printf("Enter the values and weights of each item:\n");
    for(i = 0; i < n; i++) {
        scanf("%d%d", &val[i], &wt[i]);
    }
    printf("Enter the capacity of knapsack: ");
    scanf("%d", &W);
    printf("The maximum value that can be put in a knapsack of capacity %d is: %d\n", W,
    knapSack(W, wt, val, n));

    return 0;
}

```

Output:



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C:\WINDOWS\system32\cmd.
Enter the number of items: 3
Enter the values and weights of each item:
60 10
100 20
120 30
Enter the capacity of knapsack: 50
The maximum value that can be put in a knapsack of capacity 50 is: 220
Press any key to continue . . .

```