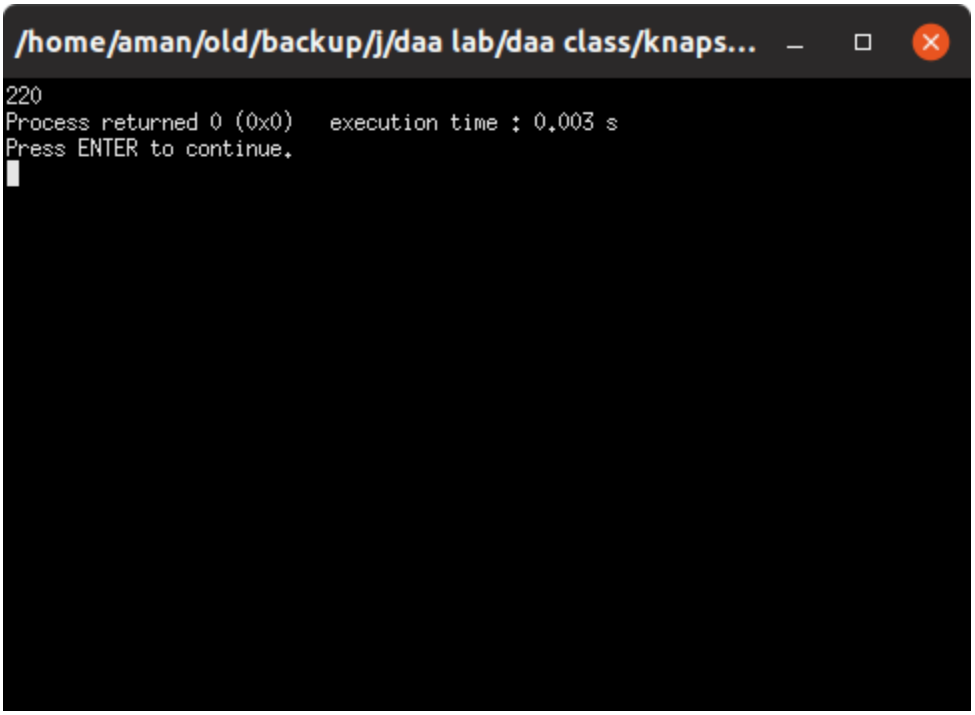
Knapsack Problem

```
#include<stdio.h>


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


int knapSack(int W, int wt[], int val[], int n)
{

if (n == 0 || W == 0)
        return 0;

if (wt[n-1] > W)
        return knapSack(W, wt, val, n-1);


else return max( val[n-1] + knapSack(W-wt[n-1], wt, val, n-1),
                                        knapSack(W, wt, val, n-1)
                                );
}

int main()
{
        int val[] = {60, 100, 120};
        int wt[] = {10, 20, 30};
        int W = 50;
        int n = sizeof(val)/sizeof(val[0]);
        printf("%d", knapSack(W, wt, val, n));
        return 0;
}
```