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#include <bits/stdc++.h>
using namespace std;

// Structure for an item which stores weight and
// corresponding value of Item
struct Item {
    int profit, weight;

    // Constructor
    Item(int profit, int weight)
    {
        this->profit = profit;
        this->weight = weight;
    }
};

// Comparison function to sort Item
// according to profit/weight ratio
static bool cmp(struct Item a, struct Item b)
{
    double r1 = (double)a.profit / (double)a.weight;
    double r2 = (double)b.profit / (double)b.weight;
    return r1 > r2;
}

// Main greedy function to solve problem
double fractionalKnapsack(int W, struct Item arr[], int N)
{
    // Sorting Item on basis of ratio
    sort(arr, arr + N, cmp);

    double finalvalue = 0.0;

    // Looping through all items
    for (int i = 0; i < N; i++) {
        // If adding Item won't overflow,
        // add it completely
        if (arr[i].weight <= W) {
            W -= arr[i].weight;
            finalvalue += arr[i].profit;
        }
    }
}

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        // If we can't add current Item,
        // add fractional part of it
        else {
            finalvalue
                += arr[i].profit
                * ((double)W / (double)arr[i].weight);
            break;
        }
    }

    // Returning final value
    return finalvalue;
}

// Driver code
int main()
{
    int W = 50;
    Item arr[] = { { 60, 10 }, { 100, 20 }, { 120, 30 } };
    int N = sizeof(arr) / sizeof(arr[0]);

    // Function call
    cout << fractionalKnapsack(W, arr, N);
    return 0;
}

```

Output

240