```
#include <iostream>
using namespace std;

void fractionalKnapsack(int n, int value[], int weight[], int capacity) {
   float ratio[n], totalValue = 0;

   // Calculate value-to-weight ratio
   for (int i = 0; i < n; i++) {
      ratio[i] = (float)value[i] / weight[i];
   }

   // Sort items by ratio in descending order (simple selection sort)
   for (int i = 0; i < n - 1; i++) {
      for (int j = i + 1; j < n; j++) {
         if (ratio[i] < ratio[j]) {
            // Swap ratio
            swap(ratio[i], ratio[j]);
            // Swap value
            swap(value[i], value[j]);
            // Swap weight
            swap(weight[i], weight[j]);
         }
      }
   }

   // Apply Greedy algorithm
```

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    for (int i = 0; i < n; i++) {
        if (capacity >= weight[i]) {
            capacity -= weight[i];
            totalValue += value[i];
        } else {
            totalValue += ratio[i] * capacity;
            break;
        }
    }

    cout << "Maximum value in Knapsack = " << totalValue << endl;
}

int main() {
    int n, capacity;
    cout << "Enter number of items: ";
    cin >> n;

    int value[n], weight[n];
    cout << "Enter value and weight of each item:\n";
    for (int i = 0; i < n; i++) {
        cin >> value[i] >> weight[i];
    }

    cout << "Enter knapsack capacity: ";
    cin >> capacity;
```

```
    fractionalKnapsack(n, value, weight, capacity);


    return 0;
}
```