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import java.util.Scanner;
import java.util.Arrays;
import java.util.Comparator;

class Item {
    double profit, weight, ratio;

    Item(double profit, double weight) {
        this.profit = profit;
        this.weight = weight;
        this.ratio = profit / weight;
    }
}

public class FractionalKnapsack {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        // Initializing objects
        Item[] items = {
            new Item(25, 18),
            new Item(24, 15),
            new Item(15, 10)
        };

        System.out.print("Enter knapsack capacity (M): ");
        double capacity = sc.nextDouble();

        // Sort items by profit-to-weight ratio in descending order
        Arrays.sort(items, Comparator.comparingDouble(i -> -i.ratio));

        double maxProfit = 0;
        double remainingCapacity = capacity;

        for (Item item : items) {
            if (remainingCapacity <= 0) break; // If knapsack is full, stop

            if (item.weight <= remainingCapacity) {
                // Take the whole item
                maxProfit += item.profit;
                remainingCapacity -= item.weight;
            } else {
                // Take fraction of item
                maxProfit += item.ratio * remainingCapacity;
                remainingCapacity = 0; // Knapsack is now full
            }
        }

        System.out.printf("Maximum profit achieved: %.2f\n", maxProfit);
        sc.close();
    }
}

```