Program

```python
def fractionalKnapsack(W, profits, weights):
    n = len(profits)

    # Build list of (ratio, profit, weight, index)
    items = []
    for i in range(n):
        ratio = profits[i] / weights[i]
        items.append([ratio, profits[i], weights[i], i + 1])  # store index as i+1

    # Sort items by ratio (descending)
    for i in range(n):
        for j in range(i + 1, n):
            if items[j][0] > items[i][0]:
                items[i], items[j] = items[j], items[i]

    finalValue = 0.0
    filledWeight = 0
    selected = []

    for ratio, profit, weight, idx in
        items: if W >= weight:      # take
        full item
            finalValue += profit
            W -= weight
            filledWeight += weight
            selected.append(f"<{idx}>")
        else:  # take fractional part
            fraction = W / weight
            finalValue += profit * fraction
            filledWeight += W
            selected.append(f"<{fraction:.2f} * {idx}>")
            break

    return finalValue, filledWeight, selected
```

```python
if __name__ == "__main__":

    profits = [200, 180, 120]
    weights = [20, 30, 10]
    W = 50

    value, filled, items = fractionalKnapsack(W, profits, weights)
    print("Maximum value in knapsack:", value)

    print("Total weight filled:", filled)

    print("Selected items:", " , ".join(items))
```

Output

```
Maximum value in knapsack: 440.0
Total weight filled: 50
Selected items: <3> , <1> , <0.67 * 2>
```