

Running Positive Test Cases:

Processing file: positive_test_exact_1.csv

Items (Weight, Value, Shelf Life):

Item 1: Weight = 18.0, Value = 47.0, Shelf Life = 3.0
Item 2: Weight = 14.0, Value = 30.0, Shelf Life = 9.0
Item 3: Weight = 11.0, Value = 84.0, Shelf Life = 4.0
Item 4: Weight = 5.0, Value = 15.0, Shelf Life = 4.0
Item 5: Weight = 4.0, Value = 13.0, Shelf Life = 1.0
Item 6: Weight = 2.0, Value = 44.0, Shelf Life = 1.0
Item 7: Weight = 17.0, Value = 21.0, Shelf Life = 10.0
Item 8: Weight = 8.0, Value = 63.0, Shelf Life = 8.0
Item 9: Weight = 11.0, Value = 92.0, Shelf Life = 10.0
Item 10: Weight = 2.0, Value = 33.0, Shelf Life = 7.0
Item 11: Weight = 10.0, Value = 42.0, Shelf Life = 3.0
Item 12: Weight = 4.0, Value = 23.0, Shelf Life = 3.0
Item 13: Weight = 18.0, Value = 37.0, Shelf Life = 5.0
Item 14: Weight = 19.0, Value = 57.0, Shelf Life = 9.0
Item 15: Weight = 14.0, Value = 65.0, Shelf Life = 8.0
Item 16: Weight = 4.0, Value = 68.0, Shelf Life = 3.0
Item 17: Weight = 17.0, Value = 69.0, Shelf Life = 6.0
Item 18: Weight = 11.0, Value = 64.0, Shelf Life = 7.0
Item 19: Weight = 14.0, Value = 44.0, Shelf Life = 10.0
Item 20: Weight = 4.0, Value = 37.0, Shelf Life = 1.0
Item 21: Weight = 1.0, Value = 84.0, Shelf Life = 3.0
Item 22: Weight = 16.0, Value = 97.0, Shelf Life = 8.0
Item 23: Weight = 6.0, Value = 65.0, Shelf Life = 6.0
Item 24: Weight = 3.0, Value = 62.0, Shelf Life = 10.0
Item 25: Weight = 12.0, Value = 85.0, Shelf Life = 7.0
Item 26: Weight = 3.0, Value = 33.0, Shelf Life = 6.0
Item 27: Weight = 18.0, Value = 39.0, Shelf Life = 7.0

Item 28: Weight = 11.0, Value = 31.0, Shelf Life = 4.0
Item 29: Weight = 17.0, Value = 34.0, Shelf Life = 9.0
Item 30: Weight = 5.0, Value = 75.0, Shelf Life = 2.0
Item 31: Weight = 2.0, Value = 47.0, Shelf Life = 2.0
Item 32: Weight = 7.0, Value = 78.0, Shelf Life = 1.0
Item 33: Weight = 10.0, Value = 69.0, Shelf Life = 7.0
Item 34: Weight = 11.0, Value = 98.0, Shelf Life = 3.0
Item 35: Weight = 18.0, Value = 16.0, Shelf Life = 2.0
Item 36: Weight = 2.0, Value = 73.0, Shelf Life = 9.0
Item 37: Weight = 13.0, Value = 100.0, Shelf Life = 7.0
Item 38: Weight = 14.0, Value = 61.0, Shelf Life = 8.0
Item 39: Weight = 15.0, Value = 21.0, Shelf Life = 1.0
Item 40: Weight = 1.0, Value = 87.0, Shelf Life = 10.0
Item 41: Weight = 3.0, Value = 71.0, Shelf Life = 7.0
Item 42: Weight = 13.0, Value = 45.0, Shelf Life = 4.0
Item 43: Weight = 9.0, Value = 66.0, Shelf Life = 5.0
Item 44: Weight = 17.0, Value = 17.0, Shelf Life = 9.0
Item 45: Weight = 10.0, Value = 56.0, Shelf Life = 3.0
Item 46: Weight = 10.0, Value = 53.0, Shelf Life = 1.0
Item 47: Weight = 11.0, Value = 56.0, Shelf Life = 9.0
Item 48: Weight = 6.0, Value = 25.0, Shelf Life = 7.0
Item 49: Weight = 5.0, Value = 31.0, Shelf Life = 4.0
Item 50: Weight = 2.0, Value = 12.0, Shelf Life = 5.0
Item 51: Weight = 14.0, Value = 79.0, Shelf Life = 2.0
Item 52: Weight = 6.0, Value = 14.0, Shelf Life = 7.0
Item 53: Weight = 2.0, Value = 69.0, Shelf Life = 3.0
Item 54: Weight = 4.0, Value = 92.0, Shelf Life = 10.0
Item 55: Weight = 11.0, Value = 33.0, Shelf Life = 7.0
Item 56: Weight = 4.0, Value = 24.0, Shelf Life = 7.0
Item 57: Weight = 10.0, Value = 95.0, Shelf Life = 10.0
Item 58: Weight = 6.0, Value = 67.0, Shelf Life = 6.0

Item 59: Weight = 20.0, Value = 87.0, Shelf Life = 4.0
Item 60: Weight = 12.0, Value = 76.0, Shelf Life = 9.0
Item 61: Weight = 4.0, Value = 98.0, Shelf Life = 8.0
Item 62: Weight = 11.0, Value = 16.0, Shelf Life = 4.0
Item 63: Weight = 8.0, Value = 57.0, Shelf Life = 6.0
Item 64: Weight = 12.0, Value = 63.0, Shelf Life = 2.0
Item 65: Weight = 2.0, Value = 47.0, Shelf Life = 4.0
Item 66: Weight = 13.0, Value = 13.0, Shelf Life = 2.0
Item 67: Weight = 12.0, Value = 20.0, Shelf Life = 8.0
Item 68: Weight = 9.0, Value = 38.0, Shelf Life = 2.0
Item 69: Weight = 20.0, Value = 11.0, Shelf Life = 3.0
Item 70: Weight = 2.0, Value = 60.0, Shelf Life = 1.0
Item 71: Weight = 9.0, Value = 73.0, Shelf Life = 8.0
Item 72: Weight = 4.0, Value = 36.0, Shelf Life = 6.0
Item 73: Weight = 10.0, Value = 38.0, Shelf Life = 2.0
Item 74: Weight = 2.0, Value = 53.0, Shelf Life = 3.0
Item 75: Weight = 17.0, Value = 27.0, Shelf Life = 8.0
Item 76: Weight = 13.0, Value = 79.0, Shelf Life = 5.0
Item 77: Weight = 10.0, Value = 10.0, Shelf Life = 3.0
Item 78: Weight = 5.0, Value = 25.0, Shelf Life = 3.0
Item 79: Weight = 6.0, Value = 20.0, Shelf Life = 4.0
Item 80: Weight = 7.0, Value = 69.0, Shelf Life = 9.0
Item 81: Weight = 19.0, Value = 14.0, Shelf Life = 5.0
Item 82: Weight = 1.0, Value = 76.0, Shelf Life = 8.0
Item 83: Weight = 15.0, Value = 55.0, Shelf Life = 1.0
Item 84: Weight = 2.0, Value = 33.0, Shelf Life = 9.0
Item 85: Weight = 11.0, Value = 26.0, Shelf Life = 6.0
Item 86: Weight = 1.0, Value = 98.0, Shelf Life = 6.0
Item 87: Weight = 15.0, Value = 79.0, Shelf Life = 10.0
Item 88: Weight = 1.0, Value = 65.0, Shelf Life = 4.0
Item 89: Weight = 14.0, Value = 40.0, Shelf Life = 7.0

Item 90: Weight = 5.0, Value = 96.0, Shelf Life = 1.0
Item 91: Weight = 19.0, Value = 54.0, Shelf Life = 5.0
Item 92: Weight = 16.0, Value = 11.0, Shelf Life = 6.0
Item 93: Weight = 6.0, Value = 52.0, Shelf Life = 5.0
Item 94: Weight = 14.0, Value = 57.0, Shelf Life = 2.0
Item 95: Weight = 18.0, Value = 65.0, Shelf Life = 8.0
Item 96: Weight = 2.0, Value = 79.0, Shelf Life = 9.0
Item 97: Weight = 17.0, Value = 12.0, Shelf Life = 6.0
Item 98: Weight = 11.0, Value = 70.0, Shelf Life = 6.0
Item 99: Weight = 5.0, Value = 88.0, Shelf Life = 6.0
Item 100: Weight = 5.0, Value = 87.0, Shelf Life = 3.0
Knapsack Value for 100 items: 2878.33

Processing file: positive_test_exact_2.csv

Items (Weight, Value, Shelf Life):

Item 1: Weight = 17.0, Value = 41.0, Shelf Life = 6.0
Item 2: Weight = 3.0, Value = 29.0, Shelf Life = 2.0
Item 3: Weight = 9.0, Value = 32.0, Shelf Life = 3.0
Item 4: Weight = 4.0, Value = 85.0, Shelf Life = 1.0
Item 5: Weight = 20.0, Value = 86.0, Shelf Life = 8.0
Item 6: Weight = 16.0, Value = 98.0, Shelf Life = 3.0
Item 7: Weight = 18.0, Value = 43.0, Shelf Life = 3.0
Item 8: Weight = 4.0, Value = 93.0, Shelf Life = 7.0
Item 9: Weight = 1.0, Value = 92.0, Shelf Life = 6.0
Item 10: Weight = 20.0, Value = 85.0, Shelf Life = 5.0
Item 11: Weight = 20.0, Value = 46.0, Shelf Life = 6.0
Item 12: Weight = 10.0, Value = 33.0, Shelf Life = 4.0
Item 13: Weight = 12.0, Value = 32.0, Shelf Life = 3.0
Item 14: Weight = 6.0, Value = 22.0, Shelf Life = 8.0
Item 15: Weight = 14.0, Value = 65.0, Shelf Life = 1.0

Item 16: Weight = 15.0, Value = 64.0, Shelf Life = 5.0
Item 17: Weight = 1.0, Value = 86.0, Shelf Life = 10.0
Item 18: Weight = 3.0, Value = 72.0, Shelf Life = 2.0
Item 19: Weight = 5.0, Value = 74.0, Shelf Life = 2.0
Item 20: Weight = 20.0, Value = 69.0, Shelf Life = 5.0
Item 21: Weight = 1.0, Value = 86.0, Shelf Life = 9.0
Item 22: Weight = 1.0, Value = 11.0, Shelf Life = 8.0
Item 23: Weight = 9.0, Value = 87.0, Shelf Life = 3.0
Item 24: Weight = 7.0, Value = 26.0, Shelf Life = 1.0
Item 25: Weight = 17.0, Value = 80.0, Shelf Life = 2.0
Item 26: Weight = 17.0, Value = 20.0, Shelf Life = 7.0
Item 27: Weight = 20.0, Value = 57.0, Shelf Life = 5.0
Item 28: Weight = 7.0, Value = 86.0, Shelf Life = 10.0
Item 29: Weight = 2.0, Value = 53.0, Shelf Life = 8.0
Item 30: Weight = 10.0, Value = 33.0, Shelf Life = 9.0
Item 31: Weight = 10.0, Value = 44.0, Shelf Life = 2.0
Item 32: Weight = 15.0, Value = 21.0, Shelf Life = 2.0
Item 33: Weight = 13.0, Value = 11.0, Shelf Life = 5.0
Item 34: Weight = 19.0, Value = 15.0, Shelf Life = 3.0
Item 35: Weight = 1.0, Value = 61.0, Shelf Life = 6.0
Item 36: Weight = 16.0, Value = 38.0, Shelf Life = 6.0
Item 37: Weight = 1.0, Value = 62.0, Shelf Life = 2.0
Item 38: Weight = 10.0, Value = 41.0, Shelf Life = 1.0
Item 39: Weight = 1.0, Value = 92.0, Shelf Life = 7.0
Item 40: Weight = 8.0, Value = 81.0, Shelf Life = 2.0
Item 41: Weight = 10.0, Value = 86.0, Shelf Life = 4.0
Item 42: Weight = 16.0, Value = 34.0, Shelf Life = 3.0
Item 43: Weight = 9.0, Value = 69.0, Shelf Life = 3.0
Item 44: Weight = 9.0, Value = 57.0, Shelf Life = 8.0
Item 45: Weight = 1.0, Value = 23.0, Shelf Life = 5.0
Item 46: Weight = 16.0, Value = 56.0, Shelf Life = 10.0

Item 47: Weight = 9.0, Value = 48.0, Shelf Life = 9.0
Item 48: Weight = 7.0, Value = 76.0, Shelf Life = 3.0
Item 49: Weight = 13.0, Value = 97.0, Shelf Life = 3.0
Item 50: Weight = 7.0, Value = 32.0, Shelf Life = 6.0
Item 51: Weight = 13.0, Value = 54.0, Shelf Life = 3.0
Item 52: Weight = 9.0, Value = 73.0, Shelf Life = 8.0
Item 53: Weight = 17.0, Value = 51.0, Shelf Life = 2.0
Item 54: Weight = 6.0, Value = 100.0, Shelf Life = 7.0
Item 55: Weight = 4.0, Value = 33.0, Shelf Life = 5.0
Item 56: Weight = 8.0, Value = 13.0, Shelf Life = 7.0
Item 57: Weight = 4.0, Value = 48.0, Shelf Life = 5.0
Item 58: Weight = 14.0, Value = 18.0, Shelf Life = 7.0
Item 59: Weight = 2.0, Value = 89.0, Shelf Life = 10.0
Item 60: Weight = 7.0, Value = 38.0, Shelf Life = 7.0
Item 61: Weight = 7.0, Value = 40.0, Shelf Life = 5.0
Item 62: Weight = 4.0, Value = 68.0, Shelf Life = 4.0
Item 63: Weight = 8.0, Value = 32.0, Shelf Life = 7.0
Item 64: Weight = 8.0, Value = 71.0, Shelf Life = 8.0
Item 65: Weight = 18.0, Value = 89.0, Shelf Life = 6.0
Item 66: Weight = 6.0, Value = 78.0, Shelf Life = 4.0
Item 67: Weight = 12.0, Value = 85.0, Shelf Life = 8.0
Item 68: Weight = 3.0, Value = 41.0, Shelf Life = 10.0
Item 69: Weight = 17.0, Value = 78.0, Shelf Life = 8.0
Item 70: Weight = 4.0, Value = 51.0, Shelf Life = 4.0
Item 71: Weight = 17.0, Value = 24.0, Shelf Life = 10.0
Item 72: Weight = 15.0, Value = 89.0, Shelf Life = 7.0
Item 73: Weight = 3.0, Value = 68.0, Shelf Life = 8.0
Item 74: Weight = 10.0, Value = 66.0, Shelf Life = 4.0
Item 75: Weight = 7.0, Value = 80.0, Shelf Life = 7.0
Item 76: Weight = 2.0, Value = 25.0, Shelf Life = 8.0
Item 77: Weight = 1.0, Value = 76.0, Shelf Life = 10.0

Item 78: Weight = 4.0, Value = 35.0, Shelf Life = 9.0
Item 79: Weight = 13.0, Value = 24.0, Shelf Life = 7.0
Item 80: Weight = 17.0, Value = 19.0, Shelf Life = 4.0
Item 81: Weight = 7.0, Value = 77.0, Shelf Life = 3.0
Item 82: Weight = 17.0, Value = 15.0, Shelf Life = 6.0
Item 83: Weight = 17.0, Value = 53.0, Shelf Life = 4.0
Item 84: Weight = 19.0, Value = 45.0, Shelf Life = 2.0
Item 85: Weight = 9.0, Value = 79.0, Shelf Life = 10.0
Item 86: Weight = 5.0, Value = 74.0, Shelf Life = 2.0
Item 87: Weight = 13.0, Value = 23.0, Shelf Life = 2.0
Item 88: Weight = 7.0, Value = 99.0, Shelf Life = 7.0
Item 89: Weight = 1.0, Value = 33.0, Shelf Life = 1.0
Item 90: Weight = 4.0, Value = 83.0, Shelf Life = 10.0
Item 91: Weight = 4.0, Value = 29.0, Shelf Life = 6.0
Item 92: Weight = 5.0, Value = 27.0, Shelf Life = 1.0
Item 93: Weight = 3.0, Value = 20.0, Shelf Life = 8.0
Item 94: Weight = 3.0, Value = 27.0, Shelf Life = 10.0
Item 95: Weight = 4.0, Value = 16.0, Shelf Life = 7.0
Item 96: Weight = 1.0, Value = 16.0, Shelf Life = 10.0
Item 97: Weight = 2.0, Value = 53.0, Shelf Life = 10.0
Item 98: Weight = 13.0, Value = 64.0, Shelf Life = 10.0
Item 99: Weight = 4.0, Value = 55.0, Shelf Life = 1.0
Item 100: Weight = 19.0, Value = 93.0, Shelf Life = 1.0
Knapsack Value for 100 items: 3018.08

Processing file: positive_test_exact_3.csv

Items (Weight, Value, Shelf Life):

Item 1: Weight = 12.0, Value = 95.0, Shelf Life = 5.0
Item 2: Weight = 18.0, Value = 65.0, Shelf Life = 7.0
Item 3: Weight = 5.0, Value = 18.0, Shelf Life = 8.0

Item 4: Weight = 20.0, Value = 82.0, Shelf Life = 6.0
Item 5: Weight = 12.0, Value = 53.0, Shelf Life = 8.0
Item 6: Weight = 15.0, Value = 61.0, Shelf Life = 8.0
Item 7: Weight = 14.0, Value = 91.0, Shelf Life = 9.0
Item 8: Weight = 20.0, Value = 24.0, Shelf Life = 1.0
Item 9: Weight = 8.0, Value = 22.0, Shelf Life = 6.0
Item 10: Weight = 16.0, Value = 60.0, Shelf Life = 10.0
Item 11: Weight = 11.0, Value = 97.0, Shelf Life = 8.0
Item 12: Weight = 19.0, Value = 14.0, Shelf Life = 10.0
Item 13: Weight = 6.0, Value = 29.0, Shelf Life = 8.0
Item 14: Weight = 5.0, Value = 24.0, Shelf Life = 3.0
Item 15: Weight = 6.0, Value = 89.0, Shelf Life = 1.0
Item 16: Weight = 6.0, Value = 45.0, Shelf Life = 10.0
Item 17: Weight = 3.0, Value = 66.0, Shelf Life = 10.0
Item 18: Weight = 5.0, Value = 34.0, Shelf Life = 7.0
Item 19: Weight = 1.0, Value = 34.0, Shelf Life = 2.0
Item 20: Weight = 19.0, Value = 65.0, Shelf Life = 10.0
Item 21: Weight = 17.0, Value = 10.0, Shelf Life = 10.0
Item 22: Weight = 6.0, Value = 77.0, Shelf Life = 5.0
Item 23: Weight = 8.0, Value = 80.0, Shelf Life = 9.0
Item 24: Weight = 3.0, Value = 35.0, Shelf Life = 1.0
Item 25: Weight = 4.0, Value = 98.0, Shelf Life = 8.0
Item 26: Weight = 17.0, Value = 25.0, Shelf Life = 7.0
Item 27: Weight = 13.0, Value = 27.0, Shelf Life = 6.0
Item 28: Weight = 19.0, Value = 35.0, Shelf Life = 4.0
Item 29: Weight = 7.0, Value = 45.0, Shelf Life = 10.0
Item 30: Weight = 11.0, Value = 20.0, Shelf Life = 3.0
Item 31: Weight = 11.0, Value = 34.0, Shelf Life = 6.0
Item 32: Weight = 9.0, Value = 74.0, Shelf Life = 7.0
Item 33: Weight = 5.0, Value = 43.0, Shelf Life = 9.0
Item 34: Weight = 17.0, Value = 62.0, Shelf Life = 6.0

Item 35: Weight = 2.0, Value = 99.0, Shelf Life = 8.0
Item 36: Weight = 20.0, Value = 82.0, Shelf Life = 4.0
Item 37: Weight = 11.0, Value = 47.0, Shelf Life = 3.0
Item 38: Weight = 3.0, Value = 61.0, Shelf Life = 10.0
Item 39: Weight = 14.0, Value = 19.0, Shelf Life = 1.0
Item 40: Weight = 16.0, Value = 41.0, Shelf Life = 3.0
Item 41: Weight = 18.0, Value = 23.0, Shelf Life = 7.0
Item 42: Weight = 10.0, Value = 61.0, Shelf Life = 3.0
Item 43: Weight = 20.0, Value = 91.0, Shelf Life = 2.0
Item 44: Weight = 7.0, Value = 54.0, Shelf Life = 4.0
Item 45: Weight = 11.0, Value = 54.0, Shelf Life = 10.0
Item 46: Weight = 16.0, Value = 82.0, Shelf Life = 1.0
Item 47: Weight = 6.0, Value = 38.0, Shelf Life = 4.0
Item 48: Weight = 17.0, Value = 33.0, Shelf Life = 3.0
Item 49: Weight = 8.0, Value = 15.0, Shelf Life = 9.0
Item 50: Weight = 11.0, Value = 55.0, Shelf Life = 9.0
Item 51: Weight = 10.0, Value = 66.0, Shelf Life = 9.0
Item 52: Weight = 3.0, Value = 54.0, Shelf Life = 9.0
Item 53: Weight = 2.0, Value = 29.0, Shelf Life = 7.0
Item 54: Weight = 1.0, Value = 63.0, Shelf Life = 4.0
Item 55: Weight = 15.0, Value = 45.0, Shelf Life = 5.0
Item 56: Weight = 10.0, Value = 88.0, Shelf Life = 4.0
Item 57: Weight = 1.0, Value = 22.0, Shelf Life = 6.0
Item 58: Weight = 2.0, Value = 11.0, Shelf Life = 5.0
Item 59: Weight = 5.0, Value = 47.0, Shelf Life = 4.0
Item 60: Weight = 6.0, Value = 60.0, Shelf Life = 7.0
Item 61: Weight = 13.0, Value = 54.0, Shelf Life = 2.0
Item 62: Weight = 20.0, Value = 87.0, Shelf Life = 5.0
Item 63: Weight = 17.0, Value = 51.0, Shelf Life = 8.0
Item 64: Weight = 20.0, Value = 59.0, Shelf Life = 1.0
Item 65: Weight = 12.0, Value = 93.0, Shelf Life = 2.0

Item 66: Weight = 3.0, Value = 23.0, Shelf Life = 3.0
Item 67: Weight = 18.0, Value = 58.0, Shelf Life = 2.0
Item 68: Weight = 7.0, Value = 48.0, Shelf Life = 10.0
Item 69: Weight = 2.0, Value = 82.0, Shelf Life = 10.0
Item 70: Weight = 14.0, Value = 85.0, Shelf Life = 8.0
Item 71: Weight = 15.0, Value = 46.0, Shelf Life = 10.0
Item 72: Weight = 2.0, Value = 72.0, Shelf Life = 6.0
Item 73: Weight = 19.0, Value = 41.0, Shelf Life = 4.0
Item 74: Weight = 17.0, Value = 62.0, Shelf Life = 7.0
Item 75: Weight = 17.0, Value = 82.0, Shelf Life = 1.0
Item 76: Weight = 12.0, Value = 21.0, Shelf Life = 7.0
Item 77: Weight = 4.0, Value = 74.0, Shelf Life = 7.0
Item 78: Weight = 6.0, Value = 73.0, Shelf Life = 1.0
Item 79: Weight = 18.0, Value = 100.0, Shelf Life = 3.0
Item 80: Weight = 5.0, Value = 24.0, Shelf Life = 2.0
Item 81: Weight = 18.0, Value = 91.0, Shelf Life = 4.0
Item 82: Weight = 4.0, Value = 95.0, Shelf Life = 3.0
Item 83: Weight = 7.0, Value = 88.0, Shelf Life = 10.0
Item 84: Weight = 14.0, Value = 90.0, Shelf Life = 1.0
Item 85: Weight = 16.0, Value = 97.0, Shelf Life = 9.0
Item 86: Weight = 12.0, Value = 46.0, Shelf Life = 9.0
Item 87: Weight = 9.0, Value = 97.0, Shelf Life = 6.0
Item 88: Weight = 12.0, Value = 58.0, Shelf Life = 3.0
Item 89: Weight = 6.0, Value = 26.0, Shelf Life = 2.0
Item 90: Weight = 9.0, Value = 46.0, Shelf Life = 5.0
Item 91: Weight = 14.0, Value = 50.0, Shelf Life = 10.0
Item 92: Weight = 18.0, Value = 14.0, Shelf Life = 4.0
Item 93: Weight = 7.0, Value = 69.0, Shelf Life = 9.0
Item 94: Weight = 5.0, Value = 41.0, Shelf Life = 3.0
Item 95: Weight = 10.0, Value = 58.0, Shelf Life = 7.0
Item 96: Weight = 18.0, Value = 32.0, Shelf Life = 8.0

Item 97: Weight = 14.0, Value = 28.0, Shelf Life = 6.0

Item 98: Weight = 4.0, Value = 19.0, Shelf Life = 4.0

Item 99: Weight = 14.0, Value = 21.0, Shelf Life = 1.0

Item 100: Weight = 8.0, Value = 23.0, Shelf Life = 3.0

Knapsack Value for 100 items: 2384.50

Running Negative Test Cases:

Processing file: negative_test_exact_1.csv

Error: Invalid data in CSV file: Invalid weight: 0.0. Weight of an item cannot be zero or negative.

Processing file: negative_test_exact_2.csv

Error: Invalid data in CSV file: Invalid value: -10.0. Value of an item cannot be negative.

Processing file: negative_test_exact_3.csv

Error: Invalid data in CSV file: Invalid value: -4.0. Value of an item cannot be negative.