

KNAPSACK PROBLEM USING DYNAMIC PROGRAMMING

| ITEM | WT | PT |
|------|----|----|
| I1 | 1 | 1 |
| I2 | 2 | 6 |
| I3 | 5 | 18 |
| I4 | 6 | 22 |
| I5 | 7 | 28 |

| | |
|----------|----|
| CAPACITY | 11 |
|----------|----|

WEIGHT WT

PROFIT PT

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | | | | | |
|---|---|---|---|---|----|----|-----|----|----|----|-----|--|--|--|--|--|
| 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | |
| 0 | 1 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | | | | |
| 0 | 1 | 6 | 7 | 7 | 18 | 19 | 24 | 25 | 25 | 25 | 25 | | | | | |
| 0 | 1 | 6 | 7 | 7 | 18 | 22 | 24* | 28 | 29 | 29 | 40 | | | | | |
| 0 | 1 | 6 | 7 | 7 | 18 | 22 | 28 | 29 | 34 | 35 | 40* | | | | | |

| | | | | | |
|----|----|--|--|--|----|
| I4 | I3 | | | | |
| 6 | 5 | | | | 11 |
| 22 | 18 | | | | 40 |