```
projectFinal
```

```
param numItems := 5;
param numPeriods := 17;
param M := 300;
#common ordering cost (units: $/order)
param S := 500;
#percentage of unit cost for item i for holding cost (units: %)
param p := 0.05;
#individual ordering cost for item type i (units: $/order)
#unit cost for item type i (units: $/item)
                               s
65.03
param:
                 34.59
           1
2
3
4
                 37.97
                               71.38
                 39.24
38.30
                               73.77
                               \frac{72.00}{77.21}
           5
                 41.07
# demand for item type i for period t (units: item)
param d:
                      2
                                  3
           1
                                                                   :=
1
2
3
4
5
6
7
8
9
           0
                      6
                                  0
                                             20
                                                        0
           0
                      0
                                  4
                                                        8
                                             0
           17
                       6
                                  0
                      4
0
                                                        8
0
           0
                                  0
                                             40
           16
                                  0
                                                        0
           12
                                             12
                      422640200220
                                  8
           0
                                             12
                                  4
                                                        0
           12
                                             16
           12
                                  0
                                                        0
                                                        0
10
           0
                                  0
                                             12
11
12
                                                        0
           0
                                  0
                                             16
           0
                                             24
                                  16
13
                                  0
                                             12
                                                        Õ
           12
14
           0
                                  Ó
                                                        0
                                             0
15
           12
                                  0
                                             4
                                                        0
16
17
                                             12
           8
                                  4
                                                        0
           Õ
                                                        0
# initial inventory level of item type i (units: item)
param Io := 1 0
2 0
3 0
4 0
5 0;
```

Inputs