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bsp_diamant.mod
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```
# Programm ohne Zielfunktion
```

```
param n;      # Anzahl Zeilen
param m;      # Anzahl Spalten
set S dimen 3;      # Felder mit Zahleneinträgen
set T dimen 2;      # leere Felder ohne Zahlen in Umgebung
```

```
var x{i in 0..n+1, j in 0..m+1} binary;
```

```
subject to fixS{(i,j,k) in S}: x[i,j]=0;
subject to fixT{(i,j) in T}: x[i,j]=0;
```

```
subject to Randoben{j in 0..m+1}: x[0,j]=0;
subject to Randunten{j in 0..m+1}: x[n+1,j]=0;
subject to Randlinks{i in 0..n+1}: x[i,0]=0;
subject to Randrechts{i in 0..n+1}: x[i,m+1]=0;
```

```
subject to minen{(i0,j0,k) in S}: sum{i in i0-1..i0+1, j in
j0-1..j0+1} x[i,j]=k;
```

```
-----
bsp_diamant.dat
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```

```
param n=5;
param m=5;
```

```
set S :=
  (1,5,1)
  (2,4,3)
  (3,2,5)
  (3,3,2)
  (3,5,0)
  (4,2,5)
  (5,3,3);
```

```
set T :=
  (1,1)
  (1,2)
  (5,5);
```

```
-----
bsp_diamant.cmd
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```

```
solve;
```

```
display {i in 1..n, j in 1 .. m} x[i,j]; # Ausgabe ohne Rand
```

MINTO-OUTPUT

Job 1737160 sent to oldstyle.ie.lehigh.edu
password: xeWJHzks
----- Begin Solver Output -----
Executing /home/neos/neos-solvers/minto-ampl/minto-ampl-driver.py
File exists
You are using the solver mintoamp.
Executing AMPL.
processing data.
processing commands.

Presolve eliminates 45 constraints and 49 variables.
Adjusted problem:
0 variables;
0 constraints
0 objectives.

Solution determined by presolve.

x[i,j] [*,*]
: 1 2 3 4 5 :=
1 0 0 1 1 0
2 1 0 1 0 0
3 1 0 0 0 0
4 1 0 1 0 0
5 1 1 0 1 0
;

MINOS-OUTPUT

Job 1737163 sent to schwinn.mcs.anl.gov
password: mLKRsvXVj
----- Begin Solver Output -----
Executing /home/neosotc/neos-5-solvers/minos-ampl/minos-driver.py
File exists
You are using the solver minos.
Executing AMPL.
processing data.
processing commands.

Presolve eliminates 45 constraints and 49 variables.
Adjusted problem:
0 variables;
0 constraints
0 objectives.

Solution determined by presolve.

x[i,j] [*,*]
: 1 2 3 4 5 :=
1 0 0 1 1 0
2 1 0 1 0 0
3 1 0 0 0 0
4 1 0 1 0 0
5 1 1 0 1 0
;