

Load a Excel data file

Excel file required in format: xls/xlsx

Drag and drop file here  
Limits: 2000000 per file

Choose file

08-various-bounds.xlsx  
23-Jan-2025

See the [Github repository](#) for sample Excel input files.

Today: 2024-12-15

Hours per day: 8

Customise report

Expert	Sp	Sheet	Sp	Sheet	Sp	Sheet	Sp	Sheet	Sp	Sheet
DEV.Bartlomiej	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DEV.Cezary	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DEV.Dariusz	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DEV.Eugeniusz	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DEV.Franciszek	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DEV.Gustaw	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DEV.Hubert	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DEV.Ignacy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DEV.Jaroslaw	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DEV.Pawel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Tasks definition

Name	Start day	End day	work	Days	workdays	Avg
DEV.pl.m	2024-12-16	2025-01-01	400	1000	77	0.25
DEV.pl.m	2024-12-16	2025-04-02	400	1000	77	0.45
DEV.pl.m	2024-12-16	2025-04-02	400	1000	77	0.55
DEV.pl.m	2024-12-16	2025-04-02	440	1000	77	0.71
DEV.pl.m	2024-12-16	2025-09-02	200	77	54	0.79
DEV.pl.m	2024-12-16	2025-04-02	200	1000	77	0.85
DEV.pl.m	2024-12-16	2025-09-02	200	77	54	0.79
DEV.pl.m	2024-12-16	2025-04-02	200	1000	77	0.85
DEV.pl.m	2024-12-16	2025-09-02	200	77	54	0.79
DEV.pl.m	2024-12-16	2025-04-02	200	1000	77	0.85

Experts names

Name	Comment
DEV.Alojzy	1 task, no bounds
DEV.Bartlomiej	1 task, 1 xbday
DEV.Cezary	1 task, 1 xbday
DEV.Dariusz	1 task, 1 xbsum
DEV.Eugeniusz	2 tasks, no bounds
DEV.Franciszek	2 tasks, 1 xbday
DEV.Gustaw	2 tasks, 1 xbsum
DEV.Hubert	2 tasks, 1 xbday, 1 xbsum
DEV.Ignacy	3 tasks, no bounds
DEV.Jaroslaw	3 tasks, 1 xbday(2), 2 xbsum

Links

Expert	Task
DEV.Alojzy	DEV.pl.m
DEV.Bartlomiej	DEV.pl.m
DEV.Cezary	DEV.pl.m
DEV.Dariusz	DEV.pl.m
DEV.Eugeniusz	DEV.pl.m
DEV.Franciszek	DEV.pl.m
DEV.Gustaw	DEV.pl.m
DEV.Hubert	DEV.pl.m
DEV.Ignacy	DEV.pl.m
DEV.Jaroslaw	DEV.pl.m

Bounds xbday

Expert	Task	Start day	End day	Lower	Upper
DEV.Bartlomiej	DEV.pl.m	2024-12-16	2024-12-27	6	6
DEV.Cezary	DEV.pl.m	2024-12-16	2024-12-20	5	5
DEV.Cezary	DEV.pl.m	2024-12-23	2024-12-27	9	9

Bounds xbsum

Expert	Task	Start day	End day	Lower	Upper
DEV.Dariusz	DEV.pl.m	2024-12-16	2024-12-30	16	16

Bounds xbdy

Expert	Start day	End day	Lower	Upper
DEV.Franciszek	2024-12-16	2024-12-27	2	2
DEV.Hubert	2024-12-16	2024-12-27	1	1
DEV.Jaroslaw	2024-12-16	2024-12-27	2	2
DEV.Pawel	2024-12-16	2024-12-27	1	1

Bounds xbsum

Expert	Task	Start day	End day	Lower	Upper
DEV.Gustaw	DEV.pl.m	2024-12-16	2024-12-30	4	4
DEV.Hubert	DEV.pl.m	2024-12-16	2024-12-30	9	9
DEV.Jaroslaw	DEV.pl.m	2024-12-16	2024-12-30	9	9
DEV.Pawel	DEV.pl.m	2024-12-16	2024-12-30	2	2

Expert bounds and preferences

Expert	Start day	End day	Lower	Upper
DEV.pl.m				

Invoicing periods

Name	Start day	End day	Days	Workdays
25-Jan	2024-12-15	2025-01-15	30	25
25-Feb	2025-01-16	2025-02-13	29	21
25-Mar	2025-02-14	2025-03-16	31	21
25-Apr	2025-03-17	2025-04-14	29	21
25-May	2025-04-15	2025-05-18	34	24

Invoicing periods bounds

Expert	Period	Lower	Upper
DEV.Pawel	25-Jan	100	200
DEV.Pawel	25-Feb	100	200
DEV.Pawel	25-Mar	100	200
DEV.Pawel	25-Apr	0	200
DEV.Pawel	25-May	0	200

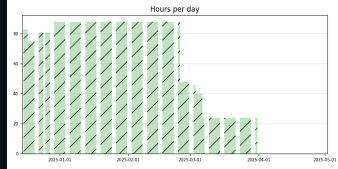
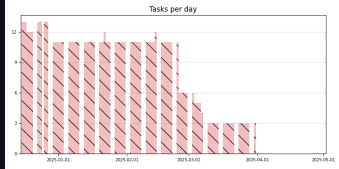
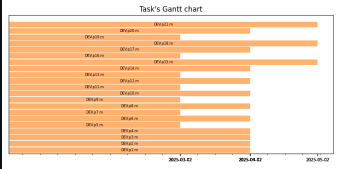
## Yumbo. Scheduling, Planning and Resource Allocation

Zbigniew Romanowski, Pawel Koczyk

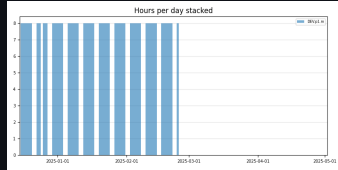
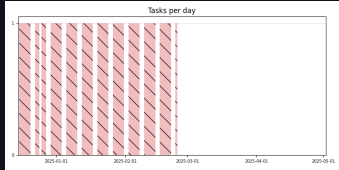
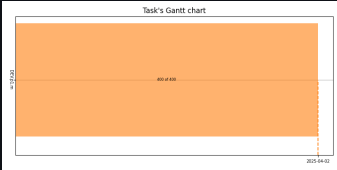
Project goals, documentation and sample Excel input files can be found on [Yumbo Github repository](#)

12 January 2025, 17:27:58 PM

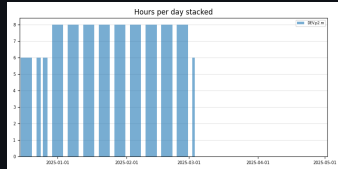
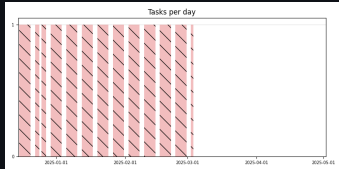
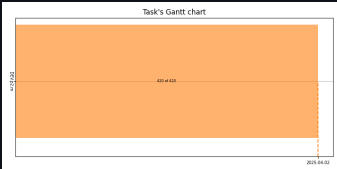
All experts overview



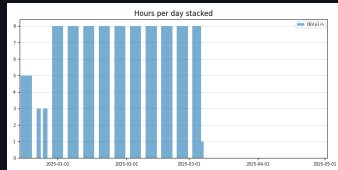
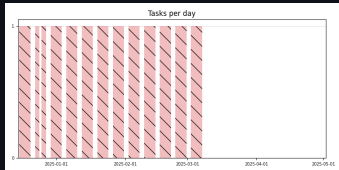
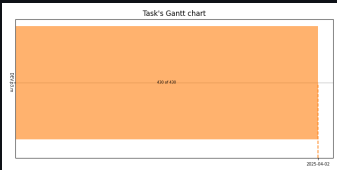
DEV.Alojzy 1 task, no bounds



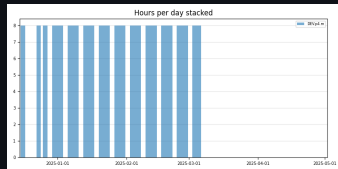
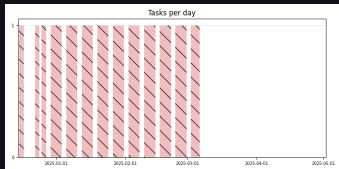
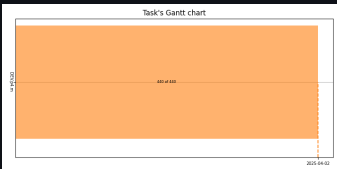
DEV.Bartlomiej 1 task, 1 xbday



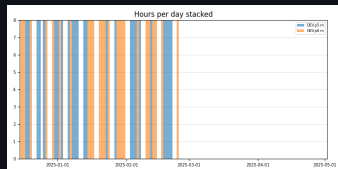
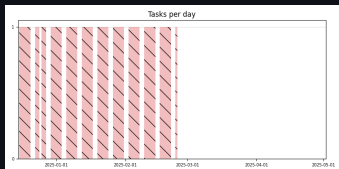
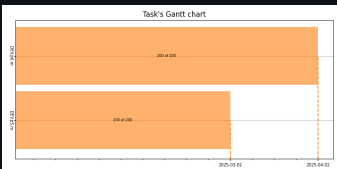
DEV.Cezary 1 task, 2 xbday



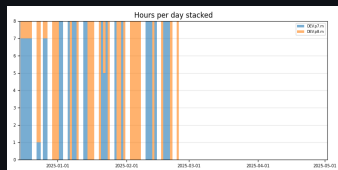
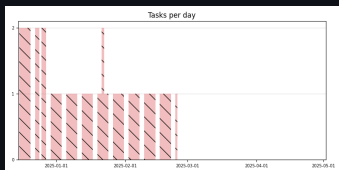
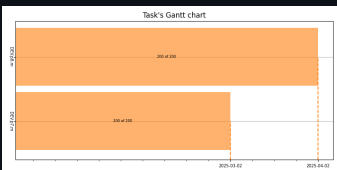
DEV.Dariusz 1 task, 1 xbsum



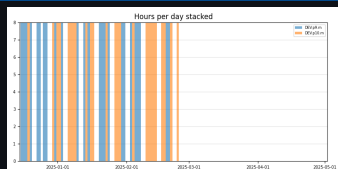
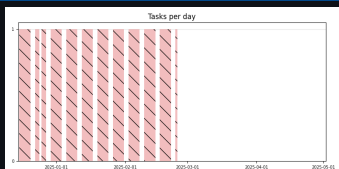
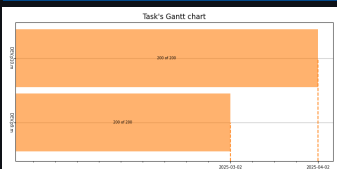
DEV.Eugeniusz 2 tasks, no bounds



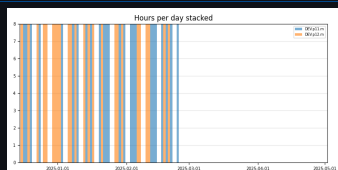
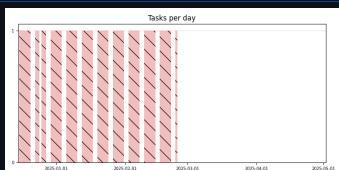
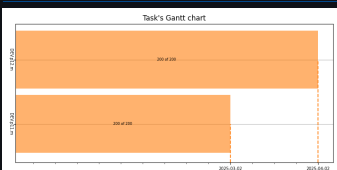
DEV.Franciszek 2 tasks, 1 xbdy



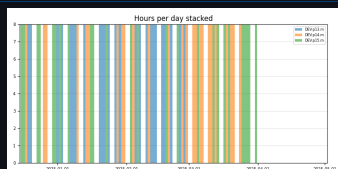
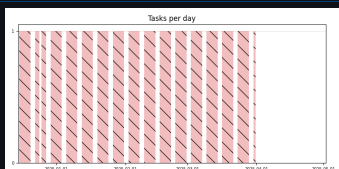
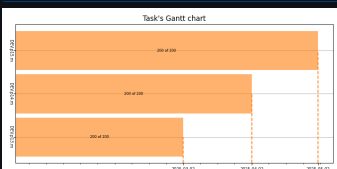
DEV.Gustaw 2 tasks, 1 xbsum



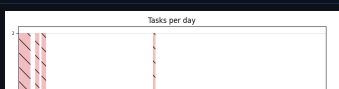
DEV.Hubert 2 tasks, 1 xbdy, 1 xbsum

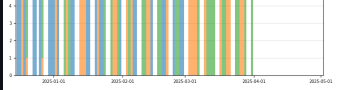
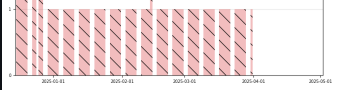
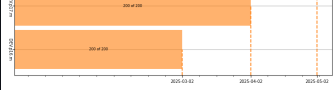


DEV.Ignacy 3 tasks, no bounds

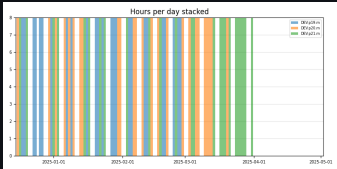
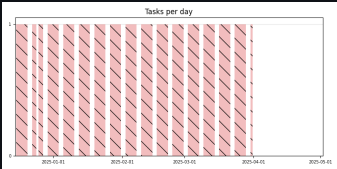
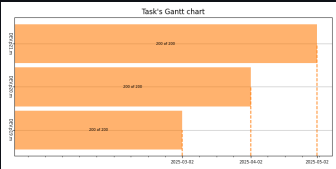


DEV.Jaroslaw 3 tasks, 1 xbdy(2), 2 xbsum





DEV,Pawel 3 tasks, 1 ubday(1), 2 ubsum



Solver output at 03 January 2025, 17:57:47 PM

```

MIGS 1.1.1: techoutlet .1
Running MIGS 1.1.1: 1875 tasks, def8811: Copyright (c) 2009 MIGS under MIT licence terms
Coefficient ranges:
  Material (1e+00, 1e+00)
  Cost (1e+00, 1e+00)
  Bound (1e+00, 1e+00)
  MS (1e+00, 1e+00)
Presolving model:
  2000 rows, 1000 cols, 1000 nonzeros 8s
  1477 rows, 1010 cols, 878 nonzeros 8s
  2400 rows, 2000 cols, 800 nonzeros 8s
Solving MIP model with:
  1000 rows
  2000 cols (1400 binary, 100 integer, 0 implied int., 0 continuous)
  800 nonzeros
Nodes | B&B Tree | Objective Bounds | Dynamic Constraints | Work | Time
Proc. | InQueue | Leaves | Expl. | BestBound | BestSol. | Gap | Data | Stg.Coeff. | LpSolve |
0 | 0 | 0 | 0 | 0.000 | 100.0000000 | inf | 0 | 0 | 0 | 0 | 0.1s
0 | 0 | 0 | 0 | 0.000 | 10000.0000000 | 10000.0000000 | 0.00% | 0 | 0 | 0 | 1000 | 0.2s
Solving report
Status: Optimal
Primal bound: 10000.0000000
Dual bound: 10000.0000000
Gap: 0% (tolerance: 0.001)
Solution status: Feasible
10000.0000000 (objective):
0 (bound viol.)
0 (int. viol.)
0 (row viol.)
0 (col viol.)
Timing:
0.17 (total)
0.12 (presolve)
0.00 (postsolve)
Nodes:
2 (total)
0 (strong br.)
0 (aggregation)
0 (heuristics)
MIGS 1.1.1: optimal solution: objective 10000.00000
1000 simple iterations
1 branching nodes
```