**Feladat: Az OAM rekonstruálás az alábbi részletek alapján…**

Min (Y0) - 9628944\_20210112233220\_minY0.lp

/\* Objective function \*/

min: +1 X1S1# +1 X2S1# +1 X1S2# +1 X2S2# +1 X1S3# +1 X2S3# +2 X1S4# +1 X2S4# +0 X1S5# +1 X2S5# +1 X1S6# +2 X2S6# +1 X1S7# +0 X2S7# +2 X1S8# +1 X2S8# +0 X1S9# +1 X2S9# +4 X1S10# +1 X2S10# +0 X1S11# +1 X2S11# +0 X1S12# +1 X2S12# +0 X1S13# +1 X2S13# +1 X1S14# +1 X2S14# +1 X1S15# +1 X2S15# +1 X1S16# +1 X2S16# +1 X1S17# +1 X2S17# +1 X1S18# +1 X2S18# +1 X1S19# +1 X2S19# - 1000000 - 1000000 - 1000000 - 1000000 - 1000000 - 1000000 - 1000000 - 1000000 - 1000000 - 1000000 - 1000000 - 1000000 - 1000000 - 1000000 - 1000000 - 1000000 - 1000000 - 1000000 - 1000000;

/\* Standard constraints \*/

 +X1S1# -X1S2# >=1;

 +X2S1# -X2S2# >=1;

 +X1S2# -X1S3# >=1;

 +X2S2# -X2S3# >=1;

 +X1S3# -X1S4# >=1;

 +X2S3# -X2S4# >=1;

 +X1S4# -X1S5# >=1;

 +X2S4# -X2S5# >=1;

 +X1S5# -X1S6# >=1;

 +X2S5# -X2S6# >=1;

 +X1S6# -X1S7# >=1;

 +X2S6# -X2S7# >=1;

 +X1S7# -X1S8# >=1;

 +X2S7# -X2S8# >=1;

 +X1S8# -X1S9# >=1;

 +X2S8# -X2S9# >=1;

 +X1S9# -X1S10# >=1;

 +X2S9# -X2S10# >=1;

 +X1S10# -X1S11# >=1;

 +X2S10# -X2S11# >=1;

 +X1S11# -X1S12# >=1;

 +X2S11# -X2S12# >=1;

 +X1S12# -X1S13# >=1;

 +X2S12# -X2S13# >=1;

 +X1S13# -X1S14# >=1;

 +X2S13# -X2S14# >=1;

 +X1S14# -X1S15# >=1;

 +X2S14# -X2S15# >=1;

 +X1S15# -X1S16# >=1;

 +X2S15# -X2S16# >=1;

 +X1S16# -X1S17# >=1;

 +X2S16# -X2S17# >=1;

 +X1S17# -X1S18# >=1;

 +X2S17# -X2S18# >=1;

 +X1S18# -X1S19# >=1;

 +X2S18# -X2S19# >=1;

 + X1S10# + X2S16# - 1000000 >=0;

 + X1S10# + X2S15# - 1000000 >=0;

 + X1S6# + X2S1# - 1000000 >=0;

 + X1S7# + X2S2# - 1000000 >=0;

 + X1S8# + X2S4# - 1000000 >=0;

 + X1S17# + X2S6# - 1000000 >=0;

 + X1S14# + X2S3# - 1000000 >=0;

 + X1S15# + X2S5# - 1000000 >=0;

 + X1S10# + X2S6# - 1000000 >=0;

 + X1S10# + X2S8# - 1000000 >=0;

 + X1S18# + X2S13# - 1000000 >=0;

 + X1S3# + X2S10# - 1000000 >=0;

 + X1S2# + X2S18# - 1000000 >=0;

 + X1S1# + X2S12# - 1000000 >=0;

 + X1S4# + X2S17# - 1000000 >=0;

 + X1S4# + X2S11# - 1000000 >=0;

 + X1S19# + X2S9# - 1000000 >=0;

 + X1S8# + X2S14# - 1000000 >=0;

 + X1S16# + X2S19# - 1000000 >=0;

Max (Y0) - 9628944\_20210112233220\_maxY0.lp

/\* Objective function \*/

min: -1 X1S1# -1 X2S1# -1 X1S2# -1 X2S2# -1 X1S3# -1 X2S3# -2 X1S4# -1 X2S4# -0 X1S5# -1 X2S5# -1 X1S6# -2 X2S6# -1 X1S7# -0 X2S7# -2 X1S8# -1 X2S8# -0 X1S9# -1 X2S9# -4 X1S10# -1 X2S10# -0 X1S11# -1 X2S11# -0 X1S12# -1 X2S12# -0 X1S13# -1 X2S13# -1 X1S14# -1 X2S14# -1 X1S15# -1 X2S15# -1 X1S16# -1 X2S16# -1 X1S17# -1 X2S17# -1 X1S18# -1 X2S18# -1 X1S19# -1 X2S19# + 1000000 + 1000000 + 1000000 + 1000000 + 1000000 + 1000000 + 1000000 + 1000000 + 1000000 + 1000000 + 1000000 + 1000000 + 1000000 + 1000000 + 1000000 + 1000000 + 1000000 + 1000000 + 1000000;

/\* Standard constraints \*/

 +X1S1# -X1S2# >=1;

 +X2S1# -X2S2# >=1;

 +X1S2# -X1S3# >=1;

 +X2S2# -X2S3# >=1;

 +X1S3# -X1S4# >=1;

 +X2S3# -X2S4# >=1;

 +X1S4# -X1S5# >=1;

 +X2S4# -X2S5# >=1;

 +X1S5# -X1S6# >=1;

 +X2S5# -X2S6# >=1;

 +X1S6# -X1S7# >=1;

 +X2S6# -X2S7# >=1;

 +X1S7# -X1S8# >=1;

 +X2S7# -X2S8# >=1;

 +X1S8# -X1S9# >=1;

 +X2S8# -X2S9# >=1;

 +X1S9# -X1S10# >=1;

 +X2S9# -X2S10# >=1;

 +X1S10# -X1S11# >=1;

 +X2S10# -X2S11# >=1;

 +X1S11# -X1S12# >=1;

 +X2S11# -X2S12# >=1;

 +X1S12# -X1S13# >=1;

 +X2S12# -X2S13# >=1;

 +X1S13# -X1S14# >=1;

 +X2S13# -X2S14# >=1;

 +X1S14# -X1S15# >=1;

 +X2S14# -X2S15# >=1;

 +X1S15# -X1S16# >=1;

 +X2S15# -X2S16# >=1;

 +X1S16# -X1S17# >=1;

 +X2S16# -X2S17# >=1;

 +X1S17# -X1S18# >=1;

 +X2S17# -X2S18# >=1;

 +X1S18# -X1S19# >=1;

 +X2S18# -X2S19# >=1;

 - X1S10# - X2S16# + 1000000 >=0;

 - X1S10# - X2S15# + 1000000 >=0;

 - X1S6# - X2S1# + 1000000 >=0;

 - X1S7# - X2S2# + 1000000 >=0;

 - X1S8# - X2S4# + 1000000 >=0;

 - X1S17# - X2S6# + 1000000 >=0;

 - X1S14# - X2S3# + 1000000 >=0;

 - X1S15# - X2S5# + 1000000 >=0;

 - X1S10# - X2S6# + 1000000 >=0;

 - X1S10# - X2S8# + 1000000 >=0;

 - X1S18# - X2S13# + 1000000 >=0;

 - X1S3# - X2S10# + 1000000 >=0;

 - X1S2# - X2S18# + 1000000 >=0;

 - X1S1# - X2S12# + 1000000 >=0;

 - X1S4# - X2S17# + 1000000 >=0;

 - X1S4# - X2S11# + 1000000 >=0;

 - X1S19# - X2S9# + 1000000 >=0;

 - X1S8# - X2S14# + 1000000 >=0;

 - X1S16# - X2S19# + 1000000 >=0;

Results – min – result\_minY0\_9628944\_20210112233220.res

Value of objective function: 279.00000000

Actual values of the variables:

X1S1# 25

X2S1# 1.00001e+06

X1S2# 24

X2S2# 1.00001e+06

X1S3# 23

X2S3# 1.00001e+06

X1S4# 22

X2S4# 1e+06

X1S5# 21

X2S5# 1e+06

X1S6# 20

X2S6# 1e+06

X1S7# 19

X2S7# 1e+06

X1S8# 18

X2S8# 1e+06

X1S9# 17

X2S9# 1e+06

X1S10# 16

X2S10# 999999

X1S11# 15

X2S11# 999998

X1S12# 14

X2S12# 999997

X1S13# 13

X2S13# 999996

X1S14# 12

X2S14# 999995

X1S15# 11

X2S15# 999994

X1S16# 10

X2S16# 999993

X1S17# 5

X2S17# 999992

X1S18# 4

X2S18# 999991

X1S19# 0

X2S19# 999990

Result – max - result\_maxY0\_9628944\_20210112233220.res

Value of objective function: 208.00000000

Actual values of the variables:

X1S1# 24

X2S1# 999987

X1S2# 23

X2S2# 999986

X1S3# 22

X2S3# 999985

X1S4# 21

X2S4# 999984

X1S5# 20

X2S5# 999983

X1S6# 13

X2S6# 999982

X1S7# 12

X2S7# 999981

X1S8# 11

X2S8# 999980

X1S9# 10

X2S9# 999979

X1S10# 9

X2S10# 999978

X1S11# 8

X2S11# 999977

X1S12# 7

X2S12# 999976

X1S13# 6

X2S13# 999975

X1S14# 5

X2S14# 999974

X1S15# 4

X2S15# 999973

X1S16# 3

X2S16# 999972

X1S17# 2

X2S17# 999971

X1S18# 1

X2S18# 999970

X1S19# 0

X2S19# 999969