Gatskevich Victoria AS32

Rules:
R1: **IF** x1 is short **AND** x2 is long **AND** x3 is short **AND** x4 is short **THEN** y = a1*x1+…a4*x4+b1
R2: **IF** x1 is medium **AND** x2 is small **AND** x3 is medium **AND** x4 is medium **THEN** y = a1*x1+…a4*x4+b2
R3: **IF** x1 is long **AND** x2 is medium **AND** x3 is long **AND** x4 is long **THEN** y= a1*x1+…a4*x4+b3.

$$\begin{bmatrix} a_1^1 & a_2^1 & a_3^1 \\ a_1^2 & a_2^2 & a_3^2 \\ a_1^3 & a_2^3 & a_3^3 \end{bmatrix} = \begin{bmatrix} -0.0000 & 0.0000 & -0.0001 \\ -0.1121 & -0.2234 & 0.0029 \\ -0.1020 & -0.0624 & 0.1276 \end{bmatrix}$$ **in practice we have matrix 3x4,**

a14,a24,a34 = 1

b[0]=-0.6667;
b[1]=1.7547;
b[2]=1.8412;

x1
small c=5 w=0.9
medium c=5.9 w=0.8
long c=6.6 w=0.9

x2
small c=2.8 w=1
medium c=2.9 w=0.9
long c=3.4 w=1

x3
small c=1.5 w=0.6
medium c=4.2 w=0.5
long c=5.5 w=0.5

x4
small c=0.2 w=0.9
medium c=1.4 w=1
long c=2 w=0.8

X1	X2	X3	X4	class	Y	REZ
5.1	3.5	1.4	0.2	1	0.5	Ok
4.9	3.0	1.4	0.2	1	0.5	Ok
4.7	3.2	1.3	0.2	1	0.5	Ok
4.6	3.1	1.5	0.2	1	0.5	Ok
5.0	3.6	1.4	0.2	1	0.5	Ok
5.4	3.9	1.7	0.4	1	0.3	Ok
4.6	3.4	1.4	0.3	1	0.4	Ok
5.0	3.4	1.5	0.2	1	0.5	Ok
4.4	2.9	1.4	0.2	1	0.5	Ok
4.9	3.1	1.5	0.1	1	0.6	Ok

5.4	3.7	1.5	0.2	1	0.5	Ok
4.8	3.4	1.6	0.2	1	0.5	Ok
4.8	3.0	1.4	0.1	1	0.6	Ok
4.3	3.0	1.1	0.1	1	0.6	Ok
5.8	4.0	1.2	0.2	1	0.5	Ok
5.7	4.4	1.5	0.4	1	0.3	Ok
5.4	3.9	1.3	0.4	1	0.3	Ok
5.1	3.5	1.4	0.3	1	0.4	Ok
5.7	3.8	1.7	0.3	1	0.4	Ok
5.1	3.8	1.5	0.3	1	0.4	Ok
5.4	3.4	1.7	0.2	1	0.5	Ok
5.1	3.7	1.5	0.4	1	0.3	Ok
4.6	3.6	1.0	0.2	1	0.5	Ok
5.1	3.3	1.7	0.5	1	0.2	Ok
4.8	3.4	1.9	0.2	1	0.5	Ok
5.0	3.0	1.6	0.2	1	0.5	Ok
5.0	3.4	1.6	0.4	1	0.3	Ok
5.2	3.5	1.5	0.2	1	0.5	Ok
5.2	3.4	1.4	0.2	1	0.5	Ok
4.7	3.2	1.6	0.2	1	0.5	Ok
4.8	3.1	1.6	0.2	1	0.5	Ok
5.4	3.4	1.5	0.4	1	0.3	Ok
5.2	4.1	1.5	0.1	1	0.6	Ok
5.5	4.2	1.4	0.2	1	0.5	Ok
4.9	3.1	1.5	0.1	1	0.6	Ok
5.0	3.2	1.2	0.2	1	0.5	Ok
5.5	3.5	1.3	0.2	1	0.5	Ok
4.9	3.1	1.5	0.1	1	0.6	Ok
4.4	3.0	1.3	0.2	1	0.5	Ok
5.1	3.4	1.5	0.2	1	0.5	Ok
5.0	3.5	1.3	0.3	1	0.4	Ok
4.5	2.3	1.3	0.3	1	0.4	Ok
4.4	3.2	1.3	0.2	1	0.5	Ok
5.0	3.5	1.6	0.6	1	0.1	Ok
5.1	3.8	1.9	0.4	1	0.3	Ok
4.8	3.0	1.4	0.3	1	0.4	Ok
5.1	3.8	1.6	0.2	1	0.5	Ok
4.6	3.2	1.4	0.2	1	0.5	Ok
5.3	3.7	1.5	0.2	1	0.5	Ok
5.0	3.3	1.4	0.2	1	0.5	Ok
7.0	3.2	4.7	1.4	2	2.2	Ok
6.4	3.2	4.5	1.5	2	1.9	Ok
6.9	3.1	4.9	1.5	2	2.9	No
5.5	2.3	4.0	1.3	2	1.9	Ok
6.5	2.8	4.6	1.5	2	2.0	Ok
5.7	2.8	4.5	1.3	2	1.8	Ok
6.3	3.3	4.7	1.6	2	2.1	Ok
4.9	2.4	3.3	1.0	2	1.7	Ok
6.6	2.9	4.6	1.3	2	1.8	Ok
5.2	2.7	3.9	1.4	2	2.0	Ok
5.0	2.0	3.5	1.0	2	1.8	Ok
5.9	3.0	4.2	1.5	2	1.9	Ok

6.0	2.2	4.0	1.0	2	1.6	Ok
6.1	2.9	4.7	1.4	2	1.9	Ok
5.6	2.9	3.6	1.3	2	1.8	Ok
6.7	3.1	4.4	1.4	2	1.7	Ok
5.6	3.0	4.5	1.5	2	2.0	Ok
5.8	2.7	4.1	1.0	2	1.5	Ok
6.2	2.2	4.5	1.5	2	2.1	Ok
5.6	2.5	3.9	1.1	2	1.7	Ok
5.9	3.2	4.8	1.8	2	2.5	No
6.1	2.8	4.0	1.3	2	1.8	Ok
6.3	2.5	4.9	1.5	2	2.6	No
6.1	2.8	4.7	1.2	2	1.7	Ok
6.4	2.9	4.3	1.3	2	1.7	Ok
6.6	3.0	4.4	1.4	2	1.8	Ok
6.8	2.8	4.8	1.4	2	2.4	Ok
6.7	3.0	5.0	1.7	2	3.2	No
6.0	2.9	4.5	1.5	2	2.0	Ok
5.7	2.6	3.5	1.0	2	1.5	Ok
5.5	2.4	3.8	1.1	2	1.7	Ok
5.5	2.4	3.7	1.0	2	1.6	Ok
5.8	2.7	3.9	1.2	2	1.7	Ok
6.0	2.7	5.1	1.6	2	3.2	No
5.4	3.0	4.5	1.5	2	2.0	Ok
6.0	3.4	4.5	1.6	2	2.0	Ok
6.7	3.1	4.7	1.5	2	2.2	Ok
6.3	2.3	4.4	1.3	2	1.9	Ok
5.6	3.0	4.1	1.3	2	1.8	Ok
5.5	2.5	4.0	1.3	2	1.9	Ok
5.5	2.6	4.4	1.2	2	1.8	Ok
6.1	3.0	4.6	1.4	2	1.9	Ok
5.8	2.6	4.0	1.2	2	1.7	Ok
5.0	2.3	3.3	1.0	2	1.7	Ok
5.6	2.7	4.2	1.3	2	1.8	Ok
5.7	3.0	4.2	1.2	2	1.7	Ok
5.7	2.9	4.2	1.3	2	1.8	Ok
6.2	2.9	4.3	1.3	2	1.7	Ok
5.1	2.5	3.0	1.1	2	1.5	No
5.7	2.8	4.1	1.3	2	1.8	Ok
6.3	3.3	6.0	2.5	3	4.3	Ok
5.8	2.7	5.1	1.9	3	3.5	Ok
7.1	3.0	5.9	2.1	3	3.8	Ok
6.3	2.9	5.6	1.8	3	3.5	Ok
6.5	3.0	5.8	2.2	3	3.9	Ok
7.6	3.0	6.6	2.1	3	3.8	Ok
4.9	2.5	4.5	1.7	3	2.4	No
7.3	2.9	6.3	1.8	3	3.5	Ok
6.7	2.5	5.8	1.8	3	3.5	Ok
7.2	3.6	6.1	2.5	3	4.2	Ok
6.5	3.2	5.1	2.0	3	3.6	Ok
6.4	2.7	5.3	1.9	3	3.6	Ok
6.8	3.0	5.5	2.1	3	3.8	Ok
5.7	2.5	5.0	2.0	3	3.4	Ok

5.8	2.8	5.1	2.4	3	4.0	Ok
6.4	3.2	5.3	2.3	3	4.0	Ok
6.5	3.0	5.5	1.8	3	3.5	Ok
7.7	3.8	6.7	2.2	3	3.9	Ok
7.7	2.6	6.9	2.3	3	4.1	Ok
6.0	2.2	5.0	1.5	3	2.8	Ok
6.9	3.2	5.7	2.3	3	4.0	Ok
5.6	2.8	4.9	2.0	3	3.1	Ok
7.7	2.8	6.7	2.0	3	3.7	Ok
6.3	2.7	4.9	1.8	3	3.1	Ok
6.7	3.3	5.7	2.1	3	3.8	Ok
7.2	3.2	6.0	1.8	3	3.5	Ok
6.2	2.8	4.8	1.8	3	2.7	Ok
6.1	3.0	4.9	1.8	3	3.0	Ok
6.4	2.8	5.6	2.1	3	3.8	Ok
7.2	3.0	5.8	1.6	3	3.3	Ok
7.4	2.8	6.1	1.9	3	3.6	Ok
7.9	3.8	6.4	2.0	3	3.6	Ok
6.4	2.8	5.6	2.2	3	3.9	Ok
6.3	2.8	5.1	1.5	3	3.1	Ok
6.1	2.6	5.6	1.4	3	3.2	Ok
7.7	3.0	6.1	2.3	3	3.9	Ok
6.3	3.4	5.6	2.4	3	4.1	Ok
6.4	3.1	5.5	1.8	3	3.5	Ok
6.0	3.0	4.8	1.8	3	2.6	Ok
6.9	3.1	5.4	2.1	3	3.7	Ok
6.7	3.1	5.6	2.4	3	4.1	Ok
6.9	3.1	5.1	2.3	3	3.9	Ok
5.8	2.7	5.1	1.9	3	3.5	Ok
6.8	3.2	5.9	2.3	3	4.0	Ok
6.7	3.3	5.7	2.5	3	4.2	Ok
6.7	3.0	5.2	2.3	3	3.9	Ok
6.3	2.5	5.0	1.9	3	3.4	Ok
6.5	3.0	5.2	2.0	3	3.6	Ok
6.2	3.4	5.4	2.3	3	4.0	Ok
5.9	3.0	5.1	1.8	3	3.4	Ok

Result = 95.333333%, 143 is Ok!