

Rules:

R1: IF x_1 is short AND x_2 is long AND x_3 is short AND x_4 is short
THEN $y = a_1x_1 + \dots a_4x_4 + b_1$
R2: IF x_1 is medium AND x_2 is small AND x_3 is medium AND x_4 is
medium THEN $y = a_1x_1 + \dots a_4x_4 + b_2$
R3: IF x_1 is long AND x_2 is medium AND x_3 is long AND x_4 is long
THEN $y = a_1x_1 + \dots a_4x_4 + b_3$.

Coefficients a

$a[0][0]=0;$ $a[0][1]=0;$ $a[0][2]=-0.0001;$ $a[0][3]=-0.8005;$
 $a[1][0]=-0.1121;$ $a[1][1]=-0.2234;$ $a[1][2]=0.0029;$ $a[1][3]=0.8005;$
 $a[2][0]=-0.102;$ $a[2][1]=-0.0624;$ $a[2][2]=0.1276;$ $a[2][3]=0.8805;$

Coefficients b

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

x_1

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

x_2

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

x_3

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

x_4

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

Table of result:

x_1	x_2	x_3	x_4	class	y	result
5.1	3.5	1.4	0.2	1	-0.8	Ok
4.9	3.0	1.4	0.2	1	-0.8	Ok
4.7	3.2	1.3	0.2	1	-0.8	Ok
4.6	3.1	1.5	0.2	1	-0.8	Ok
5.0	3.6	1.4	0.2	1	-0.8	Ok

5.4	3.9	1.7		0.4	1	-1.0	Ok
4.6	3.4	1.4	0.3		1	-0.9	Ok
5.0	3.4	1.5		0.2	1	-0.8	Ok
4.4	2.9	1.4		0.2	1	-0.8	Ok
4.9	3.1	1.5		0.1	1	-0.7	Ok
5.4	3.7	1.5	0.2	1		-0.8	Ok
4.8	3.4	1.6	0.2	1		-0.8	Ok
4.8	3.0	1.4	0.1	1		-0.7	Ok
4.3	3.0	1.1	0.1	1		-0.7	Ok
5.8	4.0	1.2	0.2	1		-0.8	Ok
5.7	4.4	1.5	0.4	1		-1.0	Ok
5.4	3.9	1.3	0.4	1		-1.0	Ok
5.1	3.5	1.4	0.3	1		-0.9	Ok
5.7	3.8	1.7	0.3	1		-0.9	Ok
5.1	3.8	1.5	0.3	1		-0.9	Ok
5.4	3.4	1.7	0.2	1		-0.8	Ok
5.1	3.7	1.5	0.4	1		-1.0	Ok
4.6	3.6	1.0	0.2	1		-0.8	Ok
5.1	3.3	1.7	0.5	1		-1.1	Ok
4.8	3.4	1.9	0.2	1		-0.8	Ok
5.0	3.0	1.6	0.2	1		-0.8	Ok
5.0	3.4	1.6	0.4	1		-1.0	Ok
5.2	3.5	1.5	0.2	1		-0.8	Ok
5.2	3.4	1.4	0.2	1		-0.8	Ok
4.7	3.2	1.6	0.2	1		-0.8	Ok
4.8	3.1	1.6	0.2	1		-0.8	Ok
5.4	3.4	1.5	0.4	1		-1.0	Ok
5.2	4.1	1.5	0.1	1		-0.7	Ok
5.5	4.2	1.4	0.2	1		-0.8	Ok
4.9	3.1	1.5	0.1	1		-0.7	Ok
5.0	3.2	1.2	0.2	1		-0.8	Ok
5.5	3.5	1.3	0.2	1		-0.8	Ok
4.9	3.1	1.5	0.1	1		-0.7	Ok
4.4	3.0	1.3	0.2	1		-0.8	Ok
5.1	3.4	1.5	0.2	1		-0.8	Ok
5.0	3.5	1.3	0.3	1		-0.9	Ok
4.5	2.3	1.3	0.3	1		-0.9	Ok
4.4	3.2	1.3	0.2	1		-0.8	Ok
5.0	3.5	1.6	0.6	1		-1.1	Ok
5.1	3.8	1.9	0.4	1		-1.0	Ok
4.8	3.0	1.4	0.3	1		-0.9	Ok
5.1	3.8	1.6	0.2	1		-0.8	Ok
4.6	3.2	1.4	0.2	1		-0.8	Ok
5.3	3.7	1.5	0.2	1		-0.8	Ok
5.0	3.3	1.4	0.2	1		-0.8	Ok
7.0	3.2	4.7	1.4	2		1.9	Ok
6.4	3.2	4.5	1.5	2		1.6	Ok
6.9	3.1	4.9	1.5	2		2.7	No
5.5	2.3	4.0	1.3	2		1.7	Ok
6.5	2.8	4.6	1.5	2		1.7	Ok
5.7	2.8	4.5	1.3	2		1.5	Ok
6.3	3.3	4.7	1.6	2		1.8	Ok
4.9	2.4	3.3	1.0	2		1.5	No
6.6	2.9	4.6	1.3	2		1.5	Ok
5.2	2.7	3.9	1.4	2		1.7	Ok
5.0	2.0	3.5	1.0	2		1.6	Ok

5.9	3.0	4.2	1.5	2	1.6	Ok
6.0	2.2	4.0	1.0	2	1.4	No
6.1	2.9	4.7	1.4	2	1.7	Ok
5.6	2.9	3.6	1.3	2	1.5	Ok
6.7	3.1	4.4	1.4	2	1.5	No
5.6	3.0	4.5	1.5	2	1.7	Ok
5.8	2.7	4.1	1.0	2	1.3	No
6.2	2.2	4.5	1.5	2	1.8	Ok
5.6	2.5	3.9	1.1	2	1.5	No
5.9	3.2	4.8	1.8	2	2.2	Ok
6.1	2.8	4.0	1.3	2	1.5	No
6.3	2.5	4.9	1.5	2	2.4	Ok
6.1	2.8	4.7	1.2	2	1.5	No
6.4	2.9	4.3	1.3	2	1.4	No
6.6	3.0	4.4	1.4	2	1.5	No
6.8	2.8	4.8	1.4	2	2.2	Ok
6.7	3.0	5.0	1.7	2	3.0	No
6.0	2.9	4.5	1.5	2	1.7	Ok
5.7	2.6	3.5	1.0	2	1.3	No
5.5	2.4	3.8	1.1	2	1.5	No
5.5	2.4	3.7	1.0	2	1.4	No
5.8	2.7	3.9	1.2	2	1.5	No
6.0	2.7	5.1	1.6	2	2.9	No
5.4	3.0	4.5	1.5	2	1.7	Ok
6.0	3.4	4.5	1.6	2	1.6	Ok
6.7	3.1	4.7	1.5	2	1.9	Ok
6.3	2.3	4.4	1.3	2	1.6	Ok
5.6	3.0	4.1	1.3	2	1.5	Ok
5.5	2.5	4.0	1.3	2	1.6	Ok
5.5	2.6	4.4	1.2	2	1.5	Ok
6.1	3.0	4.6	1.4	2	1.6	Ok
5.8	2.6	4.0	1.2	2	1.5	No
5.0	2.3	3.3	1.0	2	1.5	No
5.6	2.7	4.2	1.3	2	1.6	Ok
5.7	3.0	4.2	1.2	2	1.4	No
5.7	2.9	4.2	1.3	2	1.5	Ok
6.2	2.9	4.3	1.3	2	1.5	No
5.1	2.5	3.0	1.1	2	0.9	No
5.7	2.8	4.1	1.3	2	1.5	Ok
6.3	3.3	6.0	2.5	3	4.0	Ok
5.8	2.7	5.1	1.9	3	3.2	Ok
7.1	3.0	5.9	2.1	3	3.5	Ok
6.3	2.9	5.6	1.8	3	3.3	Ok
6.5	3.0	5.8	2.2	3	3.7	Ok
7.6	3.0	6.6	2.1	3	3.6	Ok
4.9	2.5	4.5	1.7	3	2.0	No
7.3	2.9	6.3	1.8	3	3.3	Ok
6.7	2.5	5.8	1.8	3	3.3	Ok
7.2	3.6	6.1	2.5	3	3.9	Ok
6.5	3.2	5.1	2.0	3	3.3	Ok
6.4	2.7	5.3	1.9	3	3.4	Ok
6.8	3.0	5.5	2.1	3	3.5	Ok
5.7	2.5	5.0	2.0	3	3.1	Ok
5.8	2.8	5.1	2.4	3	3.7	Ok
6.4	3.2	5.3	2.3	3	3.7	Ok
6.5	3.0	5.5	1.8	3	3.3	Ok

7.7	3.8	6.7	2.2	3	3.6	Ok
7.7	2.6	6.9	2.3	3	3.8	Ok
6.0	2.2	5.0	1.5	3	2.6	Ok
6.9	3.2	5.7	2.3	3	3.7	Ok
5.6	2.8	4.9	2.0	3	2.7	Ok
7.7	2.8	6.7	2.0	3	3.5	Ok
6.3	2.7	4.9	1.8	3	2.8	Ok
6.7	3.3	5.7	2.1	3	3.5	Ok
7.2	3.2	6.0	1.8	3	3.3	Ok
6.2	2.8	4.8	1.8	3	2.4	No
6.1	3.0	4.9	1.8	3	2.7	Ok
6.4	2.8	5.6	2.1	3	3.6	Ok
7.2	3.0	5.8	1.6	3	3.1	Ok
7.4	2.8	6.1	1.9	3	3.4	Ok
7.9	3.8	6.4	2.0	3	3.4	Ok
6.4	2.8	5.6	2.2	3	3.7	Ok
6.3	2.8	5.1	1.5	3	2.9	Ok
6.1	2.6	5.6	1.4	3	3.0	Ok
7.7	3.0	6.1	2.3	3	3.7	Ok
6.3	3.4	5.6	2.4	3	3.8	Ok
6.4	3.1	5.5	1.8	3	3.3	Ok
6.0	3.0	4.8	1.8	3	2.3	No
6.9	3.1	5.4	2.1	3	3.5	Ok
6.7	3.1	5.6	2.4	3	3.8	Ok
6.9	3.1	5.1	2.3	3	3.6	Ok
5.8	2.7	5.1	1.9	3	3.2	Ok
6.8	3.2	5.9	2.3	3	3.7	Ok
6.7	3.3	5.7	2.5	3	3.9	Ok
6.7	3.0	5.2	2.3	3	3.7	Ok
6.3	2.5	5.0	1.9	3	3.2	Ok
6.5	3.0	5.2	2.0	3	3.4	Ok
6.2	3.4	5.4	2.3	3	3.7	Ok
5.9	3.0	5.1	1.8	3	3.1	Ok
Result	=	84%,		126	is	Ok!