Contemporary Data Processing Technology (CCOD)
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Control two metro cars using Speed(X), Distance(Y), and Brake(Z). In this work we assume a virtual loop with 1000 conventional units on which two metro cars. The speed of train is denoted as X. Speed ranges from 0 to 20 conventional units per unit of time. The distance between both train is denoted as Y. We assume that the train should not crash. So we have to calculate break of train, we denoted it as Z.

Set of 9 rules of all combination of {speed = very slow, slow, medium, fast, very fast} and {distance = very short, short, medium, long, very long}

Set of rules

IF speed IS	AND distance IS	THEN break IS
vSLOW	vSHORT	MEDIUM
vSLOW	SHORT	WEAK
vSLOW	MEDIUM	WEAK
vSLOW	LONG	vWEAK
vSLOW	vLONG	vWEAK
SLOW	vSHORT	STRONG
SLOW	SHORT	MEDIUM
SLOW	MEDIUM	MEDIUM
SLOW	LONG	WEAK
SLOW	vLONG	vWEAK
MEDIUM	vSHORT	STRONG
MEDIUM	SHORT	STRONG
MEDIUM	MEDIUM	MEDIUM
MEDIUM	LONG	WEAK
MEDIUM	vLONG	vWEAK
FAST	vSHORT	vSTRONG
FAST	SHORT	STRONG
FAST	MEDIUM	MEDIUM
FAST	LONG	WEAK
FAST	vLONG	vWEAK
vFAST	vSHORT	vSTRONG
vFAST	SHORT	vSTRONG
vFAST	MEDIUM	STRONG
vFAST	LONG	MEDIUM
vFAST	vLONG	WEAK

Values

speed	distance	break
0	0	4,5
0	200	3
0	400	3
0	600	0,875
0	800	0,875
0	1000	0,875
5	0	5,764706
5	200	4,0625
5	400	4,0625
5	600	2,285714
5	800	0,875
5	1000	0,875
10	0	6
10	200	6
10	400	4,5
10	600	3
10	800	0,875
10	1000	0,875
15	0	8,636364
15	200	7,125
15	400	4,9375
15	600	3,235294
15	800	1,214286
15	1000	1,214286
20	0	8,636364
20	200	8,636364
20	400	6
20	600	4,5
20	800	3
20	1000	3

The graphic of break vs speed and distance