Diagram

Description automatically generated

Label Cholesterol Weight Height

0 0 221 240 69

1 1 186 172 72

2 0 170 129 66

Let b = -500, w1, w2, w3 are all 1

W1x1 + w2x2 + w3x3 – 500

221 + 240 + 70 – 500 = 31 -> sig(31) = 0.99 -> 1

186 + 172 + 72 - 500 = -70 -> sig(-70) = 0.000003 -> 0

170 + 129 + 66 – 500 = -135 -> sig(-135) = 0. 000002 -> 0

Train set w/o label:

[[170 129 66]

[221 240 69]]

Test set w/o label:

[[186 172 72]]

Train set label:

[0 1]

Test set label:

[0]

Weights: [ -2. -340. -258. -132.]

Errors: [1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1]

The perceptrons predict test labels are:

[1]

The true test labels are:

[0]