**Coding the Perceptron Algorithm**

Time to code! In this quiz, you'll have the chance to implement the perceptron algorithm to separate the following data (given in the file data.csv).

Chart, scatter chart

Description automatically generated

Recall that the perceptron step works as follows. For a point with coordinates (*p*,*q*), label *y*, and prediction given by the equation y^​ = step(w1x1 + w2x2 + b):

* If the point is correctly classified, do nothing.
* If the point is classified positive, but it has a negative label, subtract *αp*, *αq*, and *α* from *w*1​, *w*2​, and *b* respectively.
* If the point is classified negative, but it has a positive label, add *αp*, *αq*, and *α* to *w*1​, *w*2​, and *b* respectively.