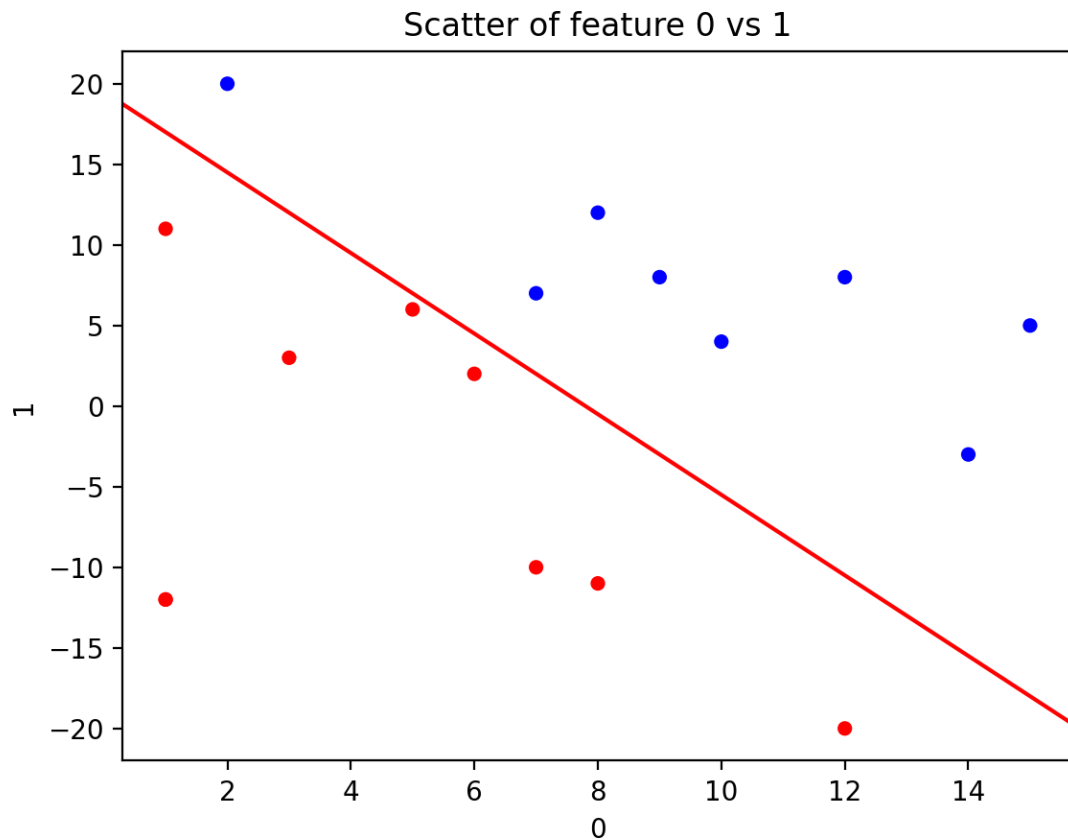


1. Plot for Perceptron Algorithm:



2. Choice of alpha for Linear Regression = 0.75
Choice of iterations for Linear Regression = 30

The reason for this is that the learning rate (alpha) should neither be very large nor should it be very short because a large alpha may cause convergence to never happen and when it is too short, convergence may take a long time to happen. Hence, we can find that for an alpha value of 0.75 the convergence happens in less than or equal to 30 iterations because the decrement of R becomes negligible after 30 iterations and hence, we assume that convergence has happened.