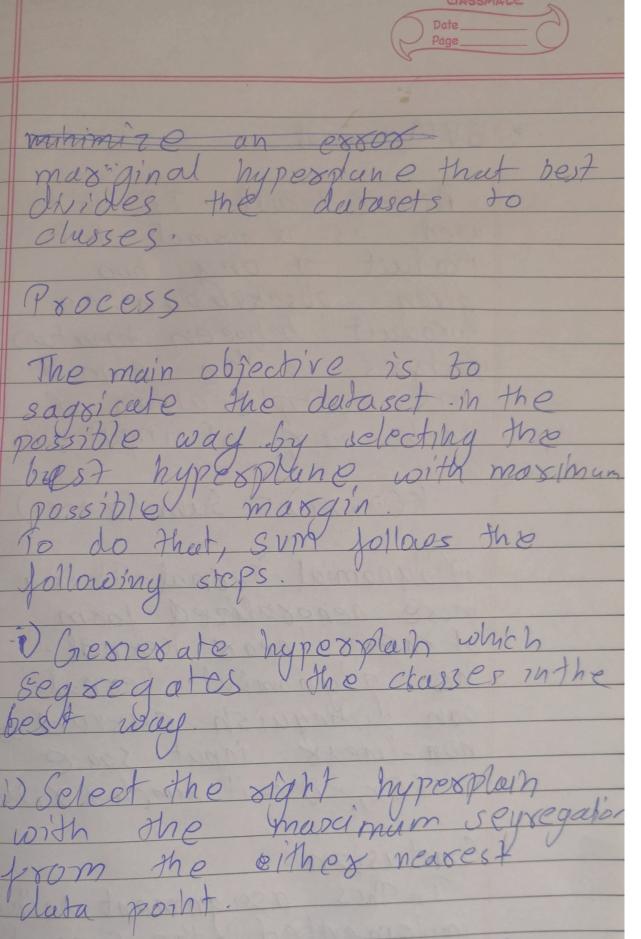
Assignment Suppost Vector Aim: Implement SVM for rexforming classification and find ibs accuracy on the given data. · Theoxy Suppost Vector Machine: Generally SVM is constas Considered to be a classified approach, it but can be employed in both types of classification if regressing explem. problem SUM constructs a hypeoplano in multiclimensional spuce to seperate defrerent classes. SVM optimal hyperplane itesahve is used to minmize un exxox. The core idea SVM is to find a



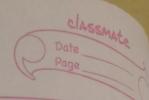
i) Select the sight hypesplain with the marinum sevegator from the either nearest data point.

olusses.

following steps.

Process

for non-lined 8 and plunes sum Uses a Kesnal Hick & o trunspon the input space to a highes dimention space.



· SVM resnal

Winear Kernal: - It can be used as a normal dot product of any two given observation the product between tows two vectors is the sum of the multiple cution of each pair of input values

R(H, Xi) = Sum (XXXI)

ii) Polynomial Resnal-It is a
mose generalized form
of the linear ResnalThe polynomial Resnal
con distinguish curved or
non-linear input space R(x,xi) = it sum(i(x))id

Conclusion.
In This assignment we have implemented the support vertox machine algorithm on the Brill authentication dataset.