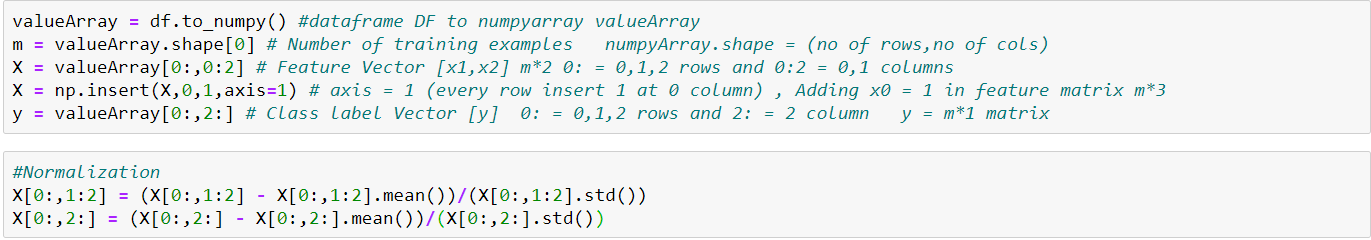
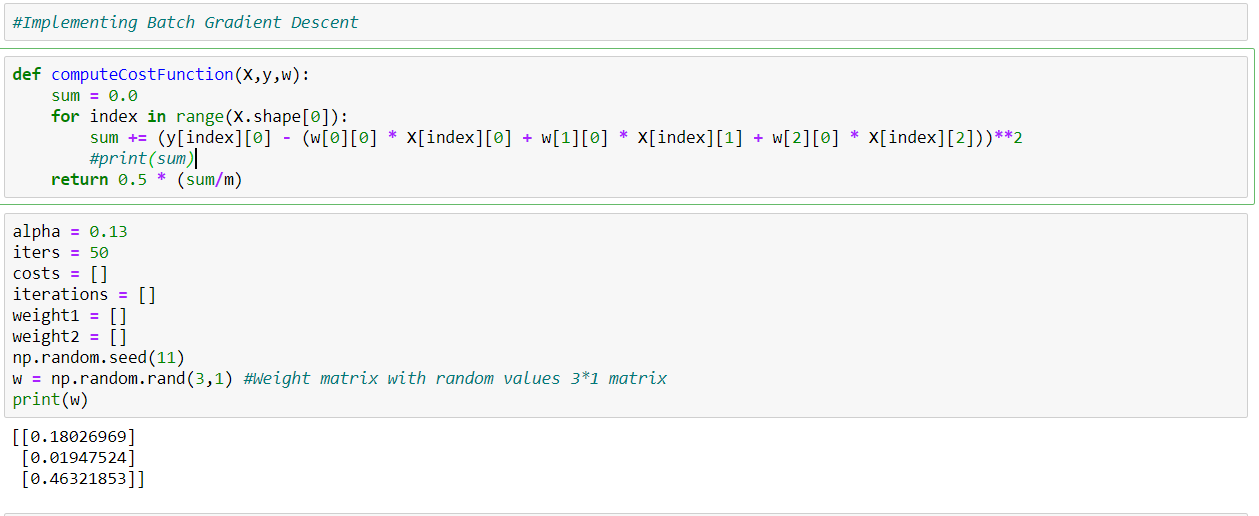
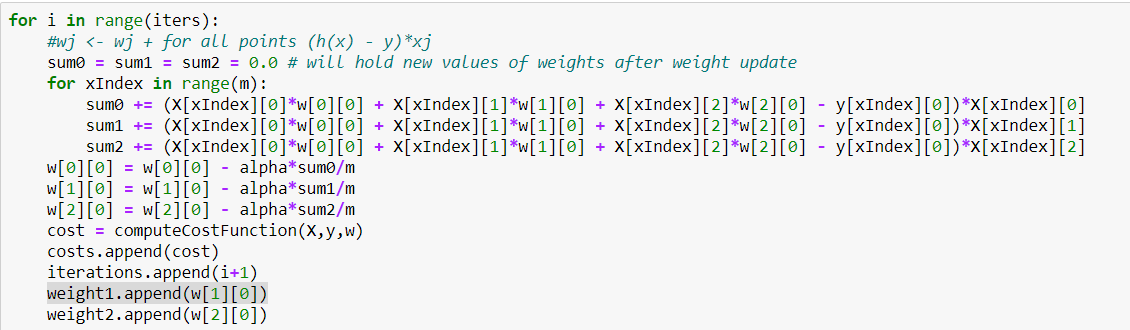
ASSIGNMENT – 1 -> 2017A7PS0110H , SAI CHARAN SAMINENI

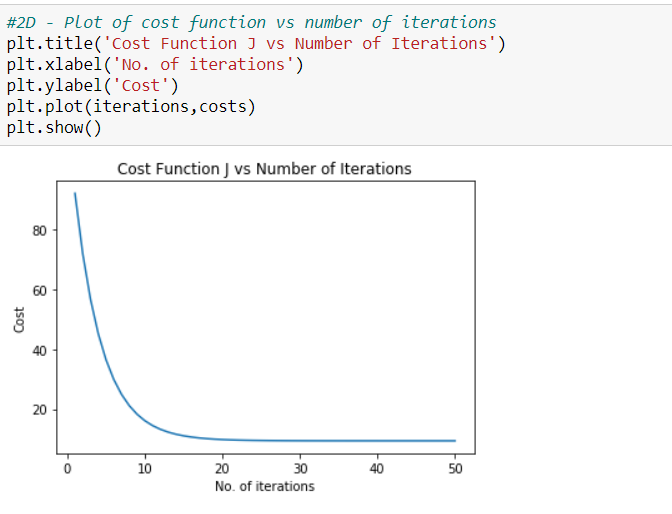
Question 1 ->

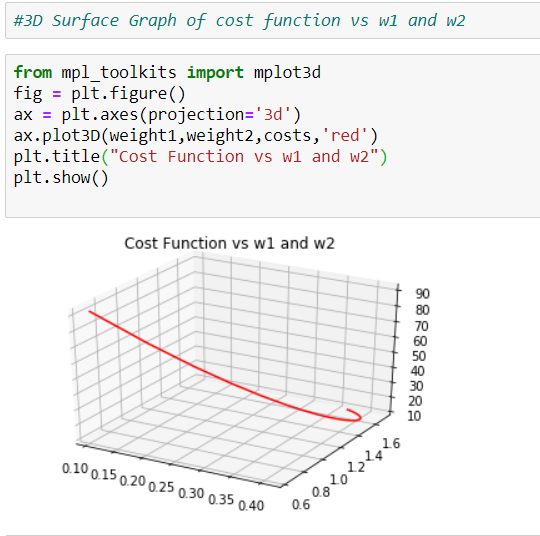


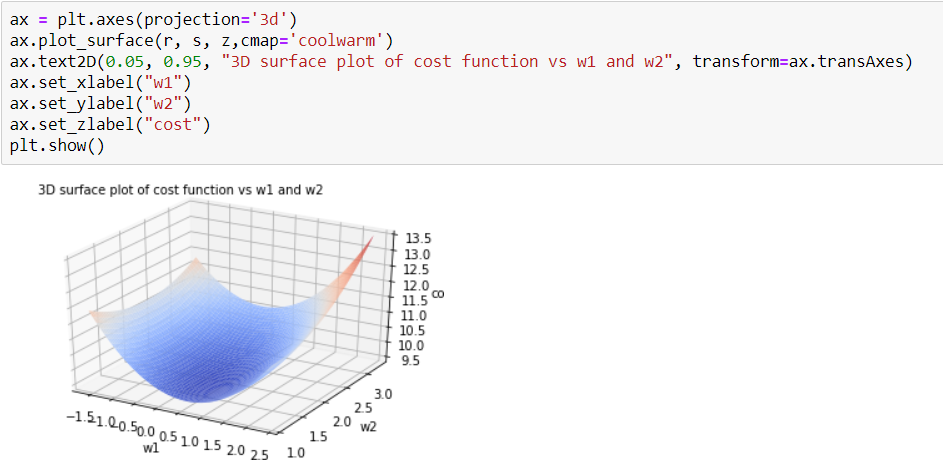




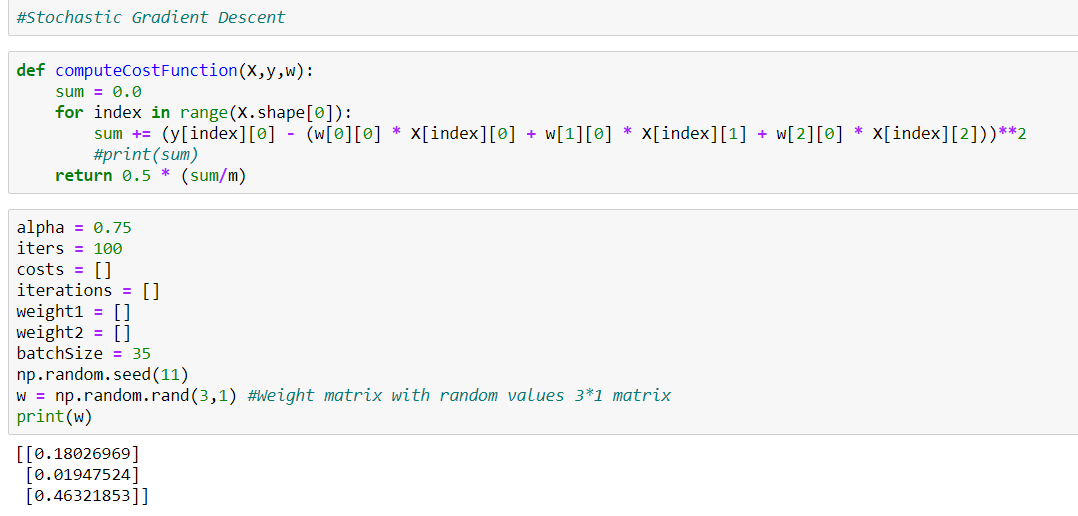
Results ->

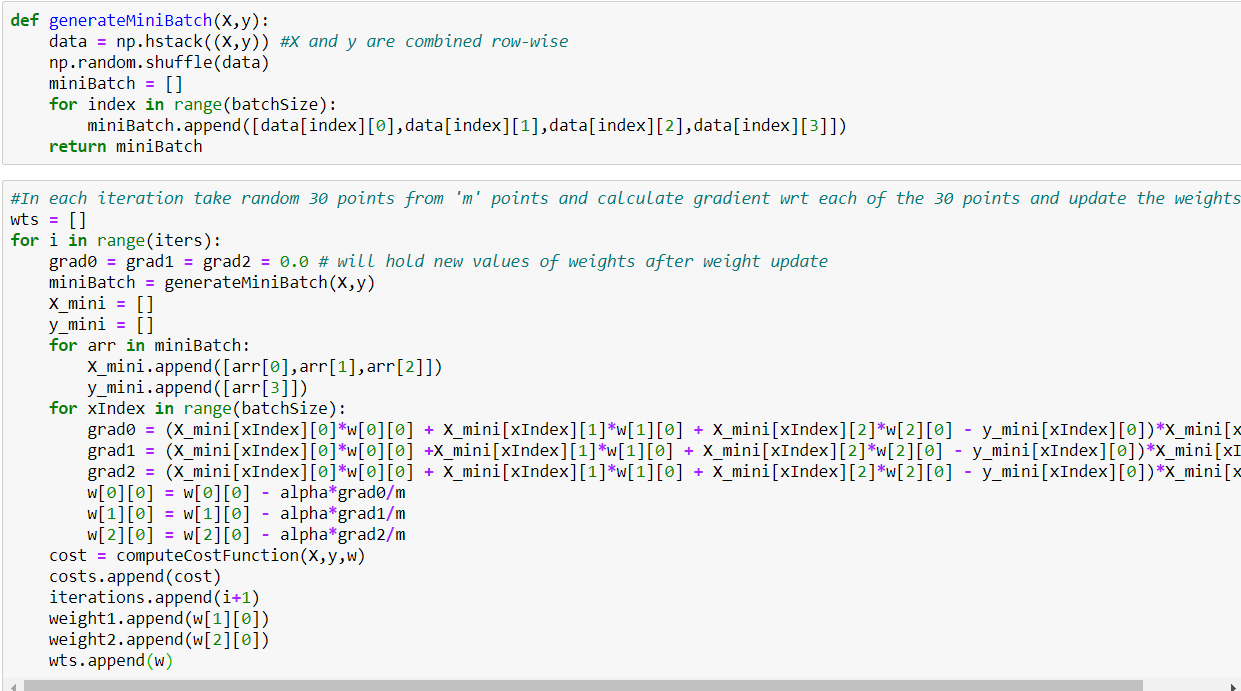


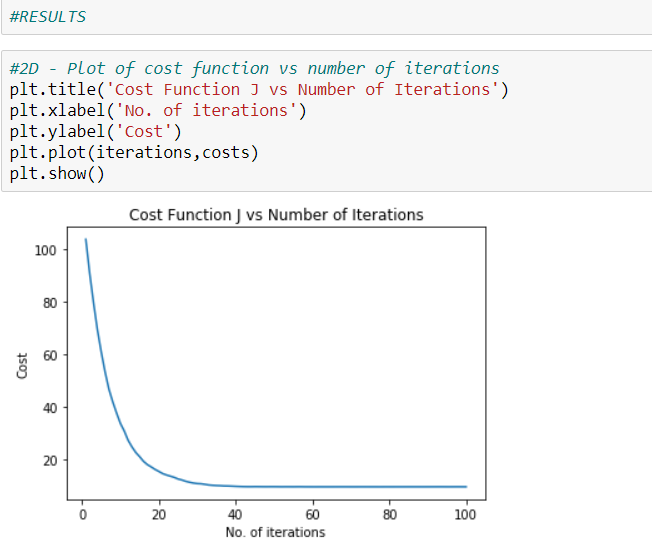


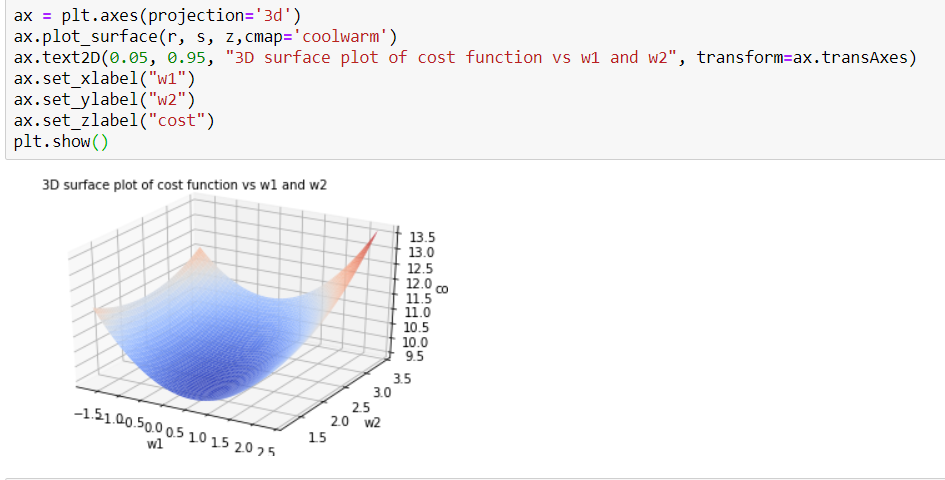


Question 2 ->



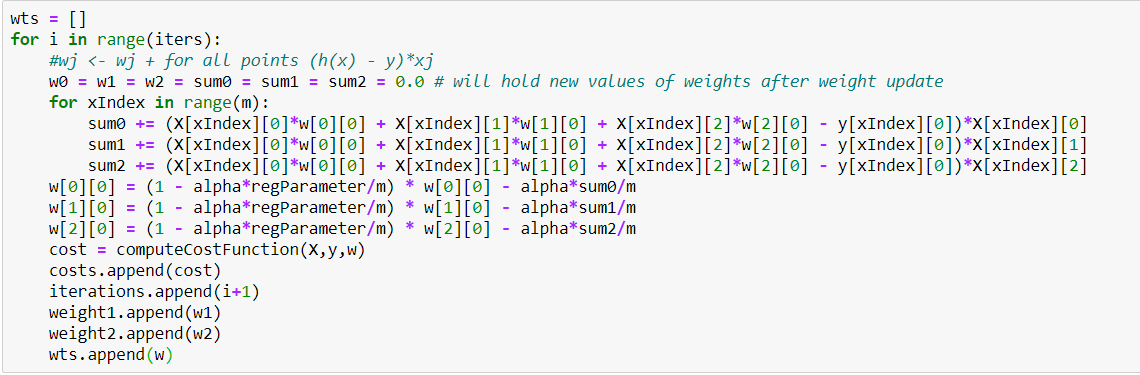


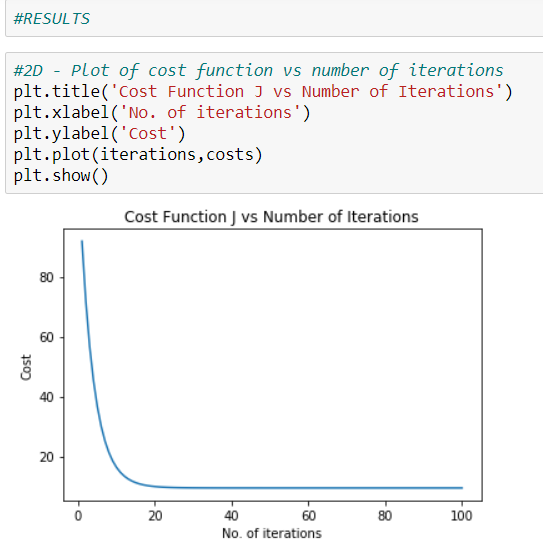


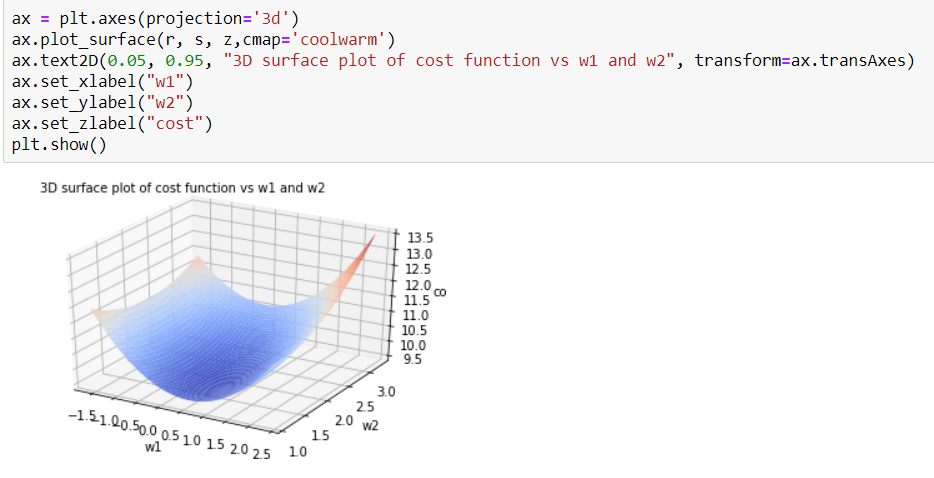


Question 3 ->

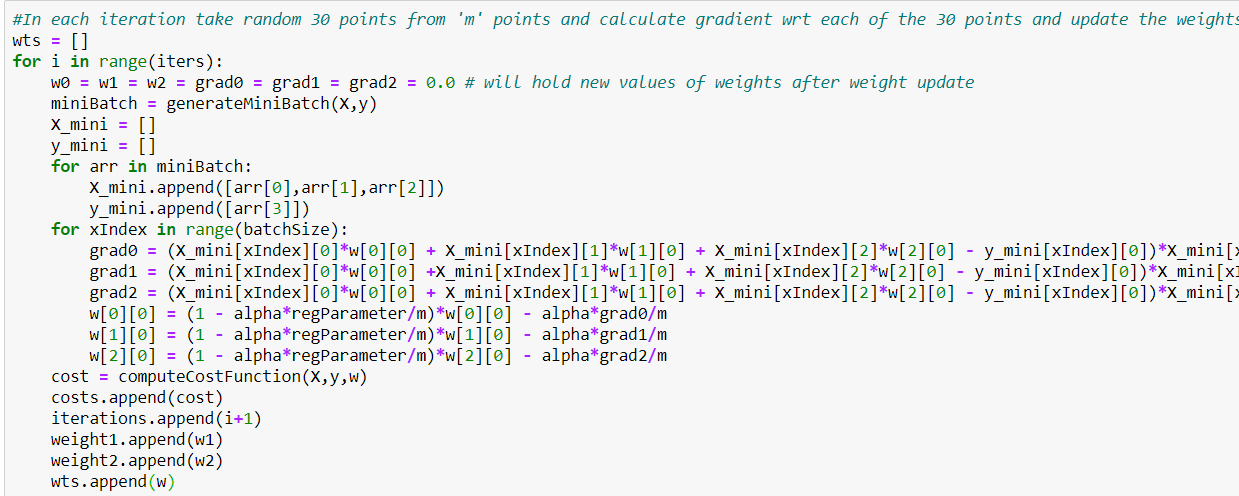
Batch Gradient Descent -

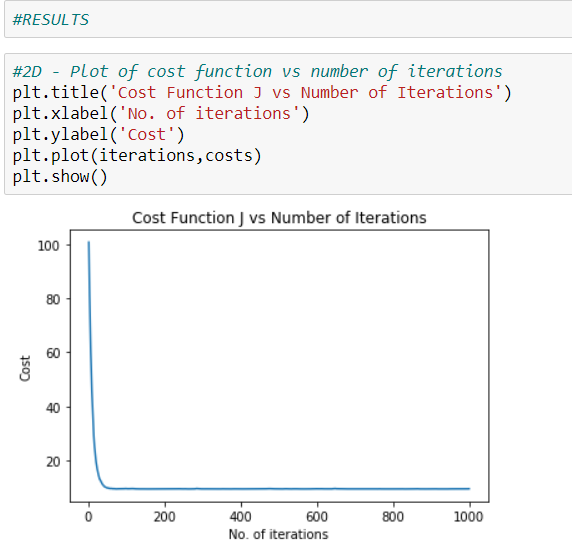


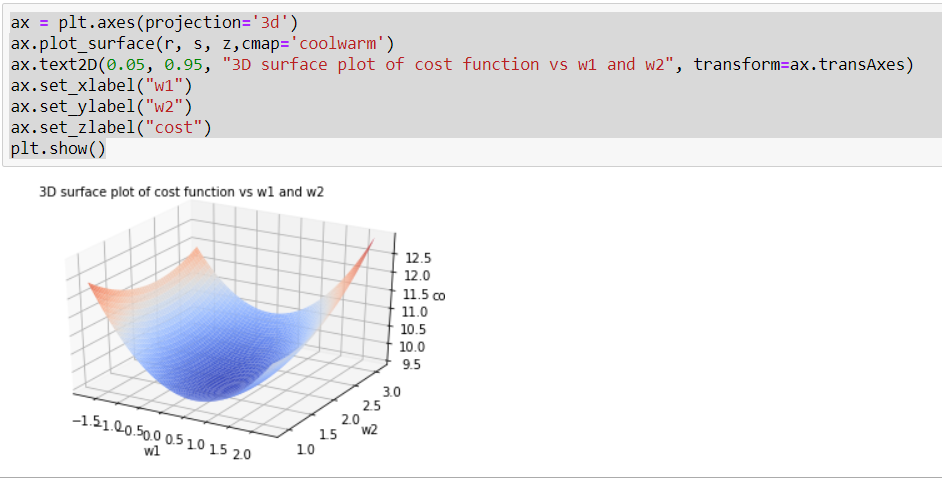




Stochastic –

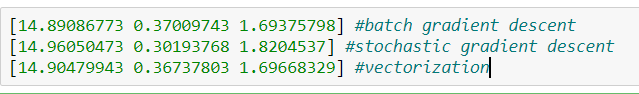






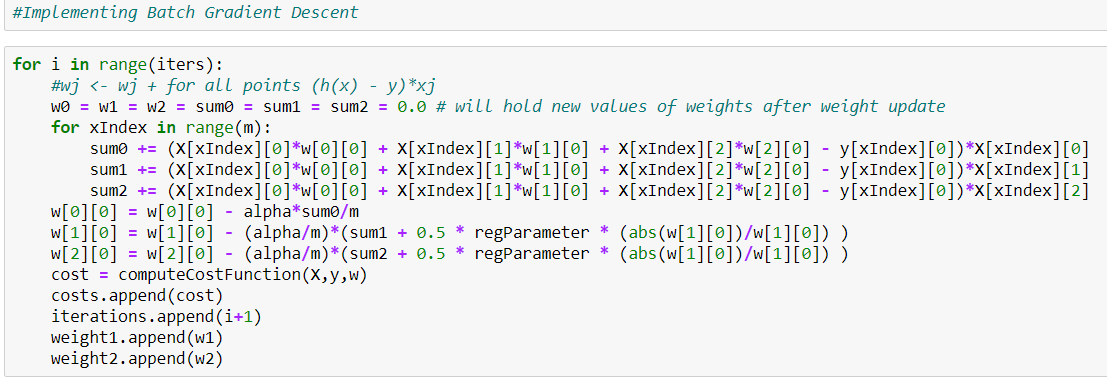
Question 4 ->

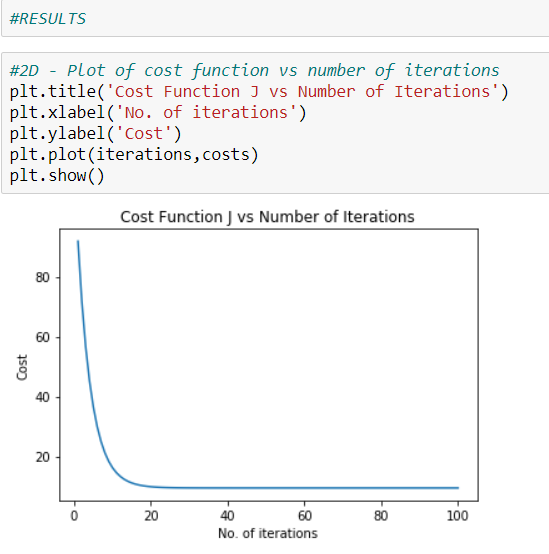


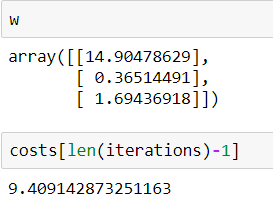


Question 5->

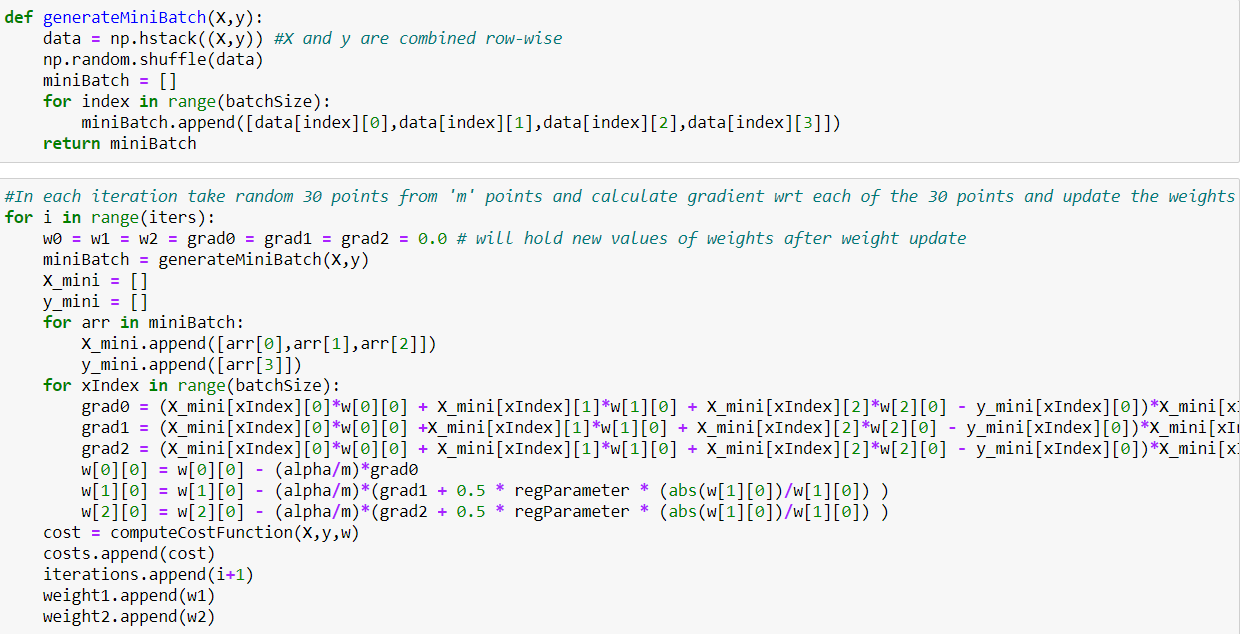
Batch gradient descent -

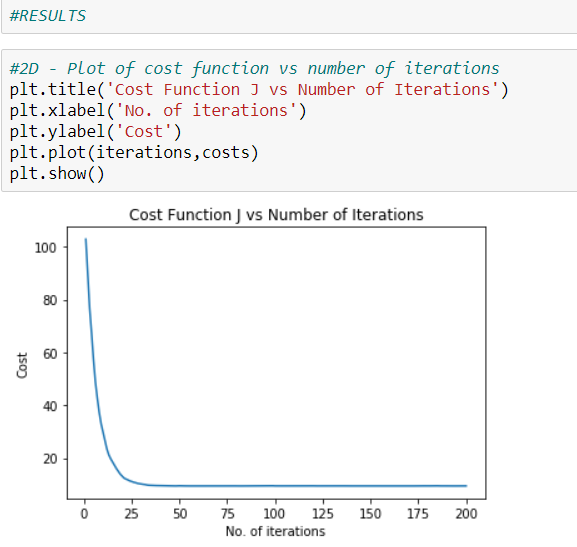


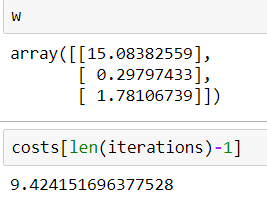




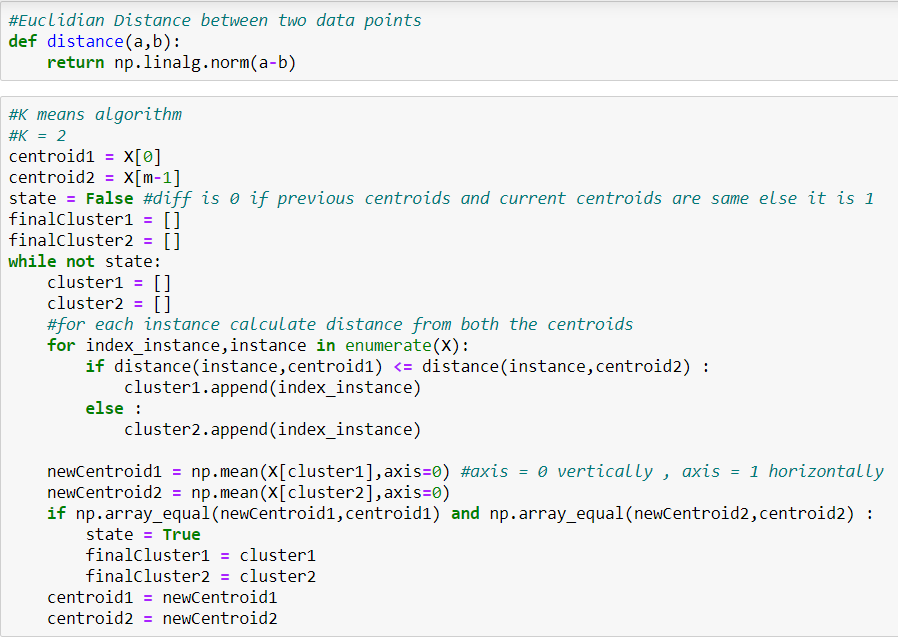
Stochastic gradient descent -

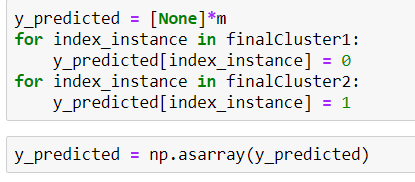


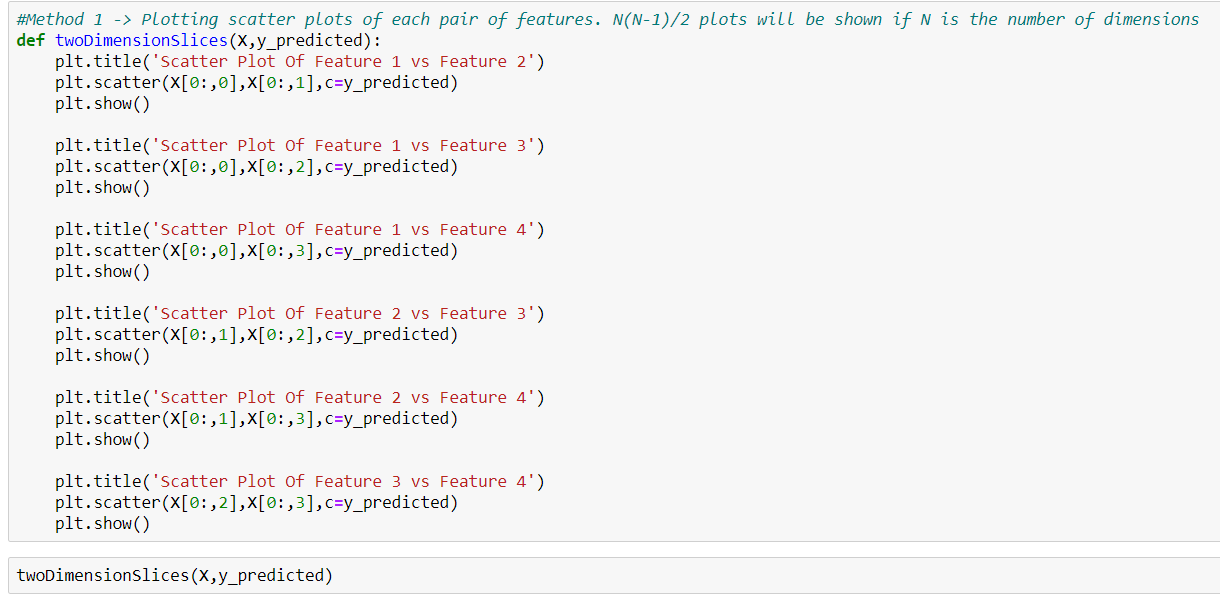


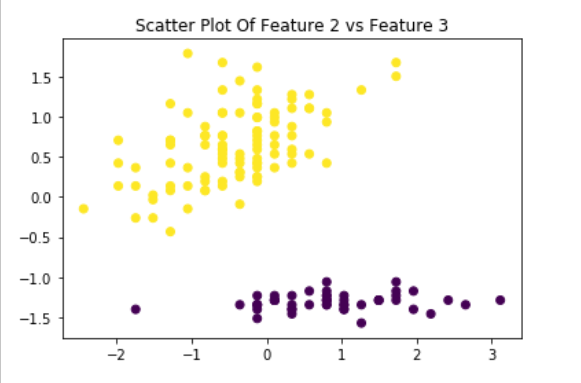
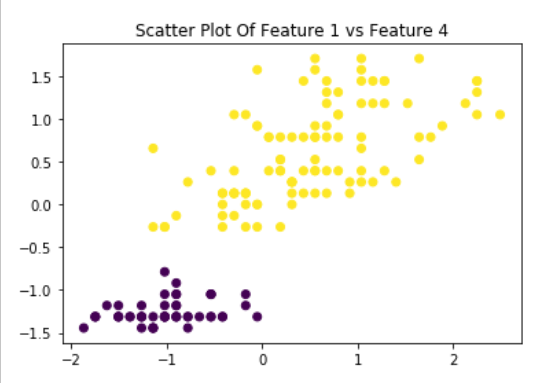
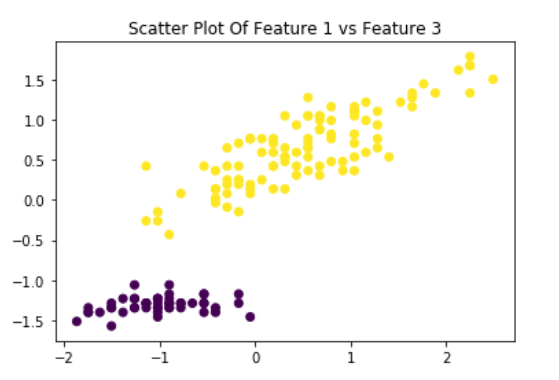
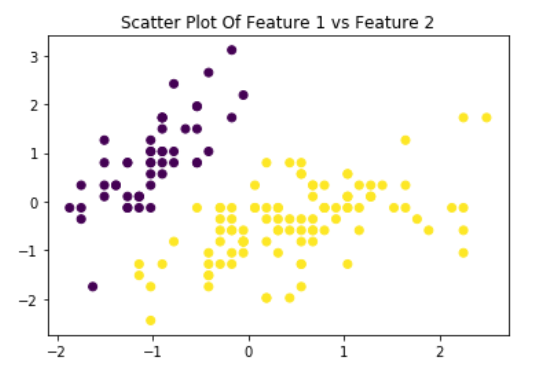


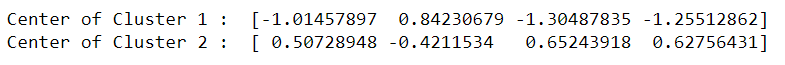
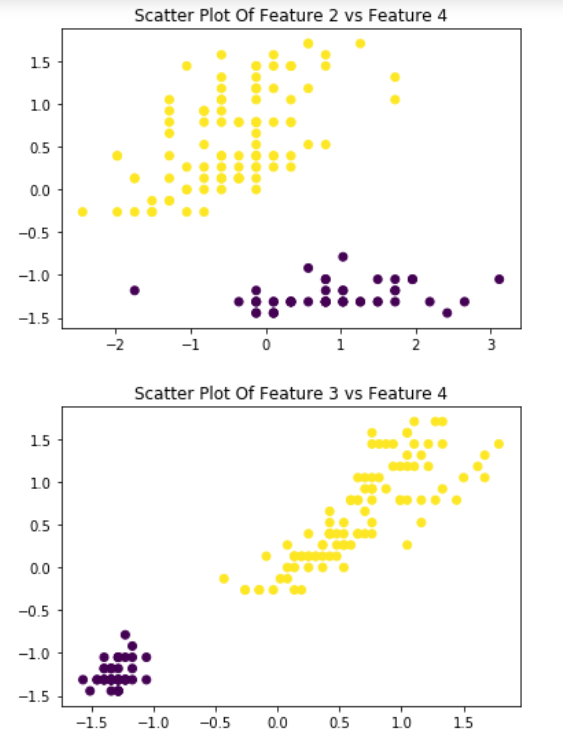
Question 6->



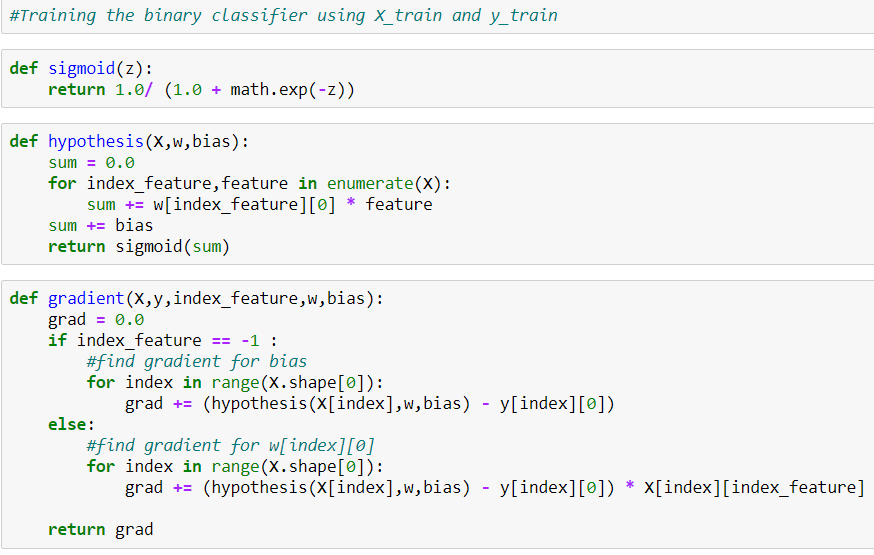


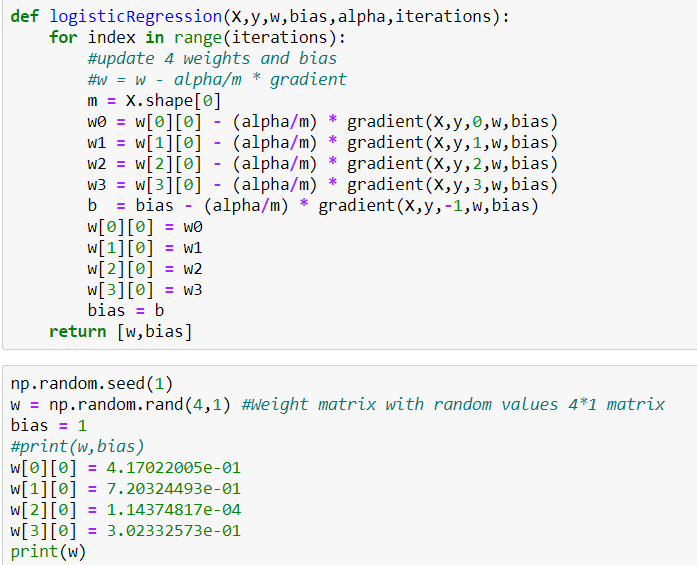


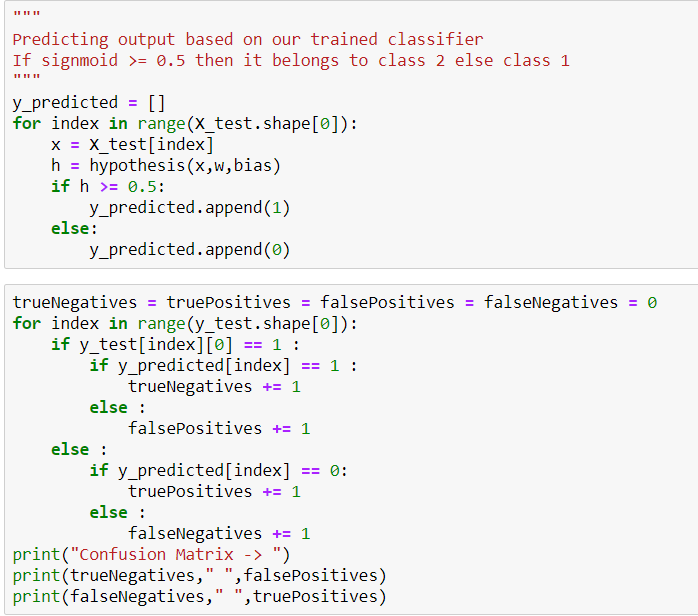


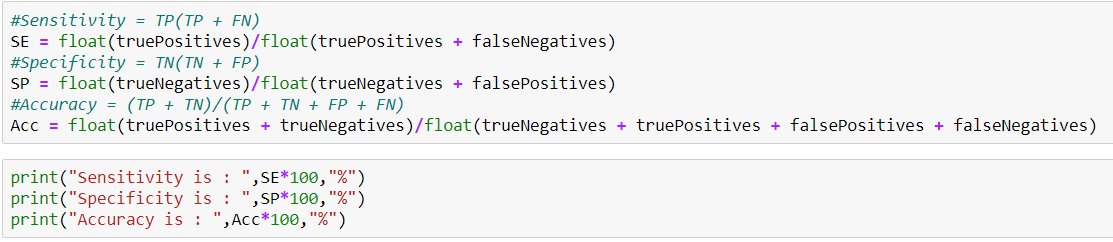


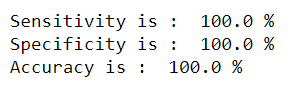
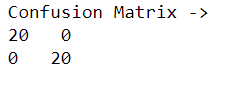
Question 7 ->





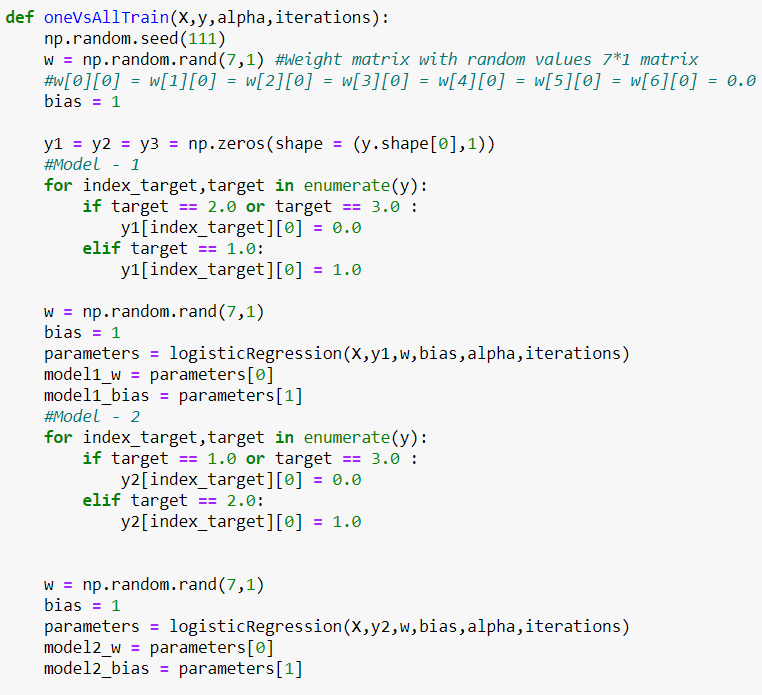


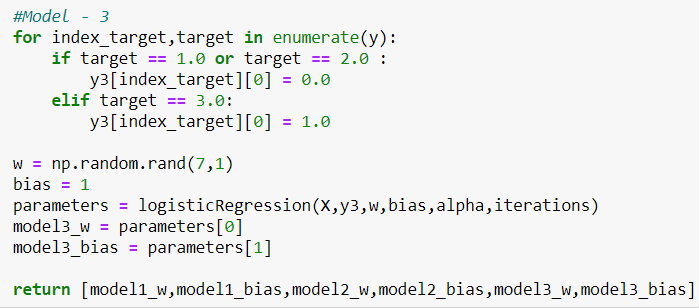


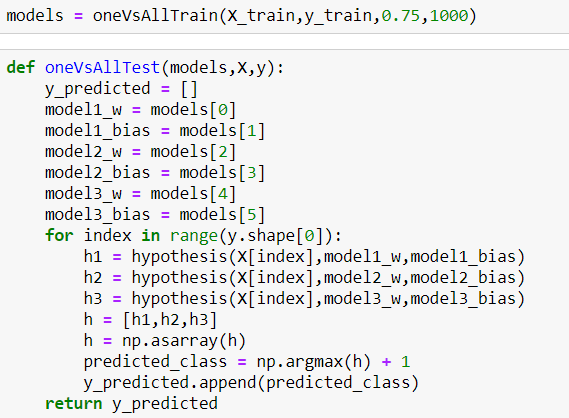


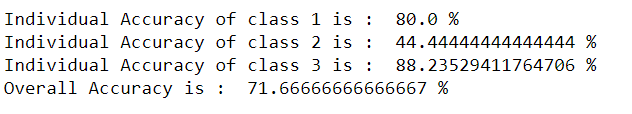
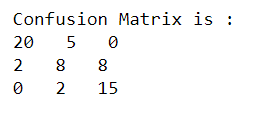
Question 8 ->

One Vs All



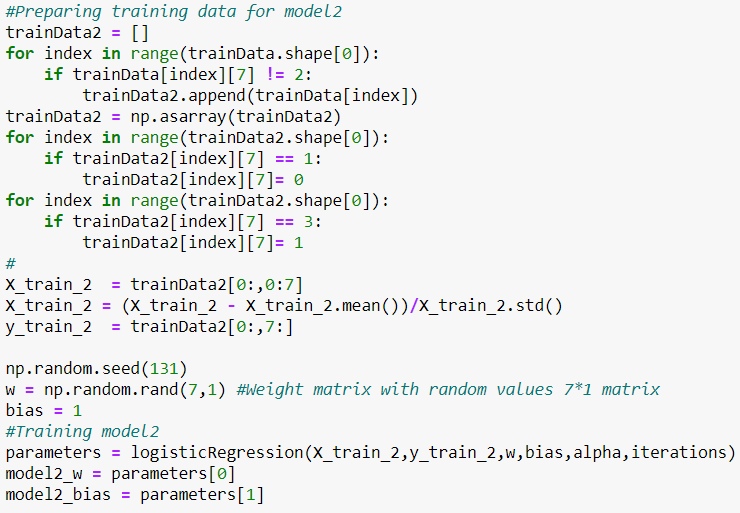


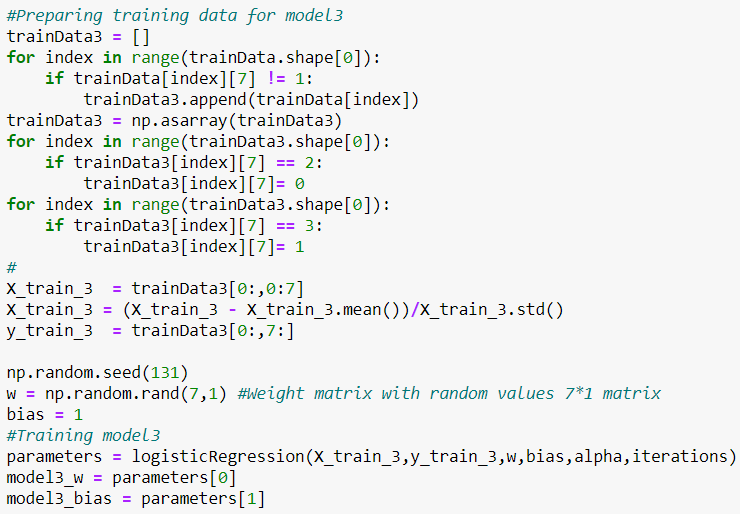


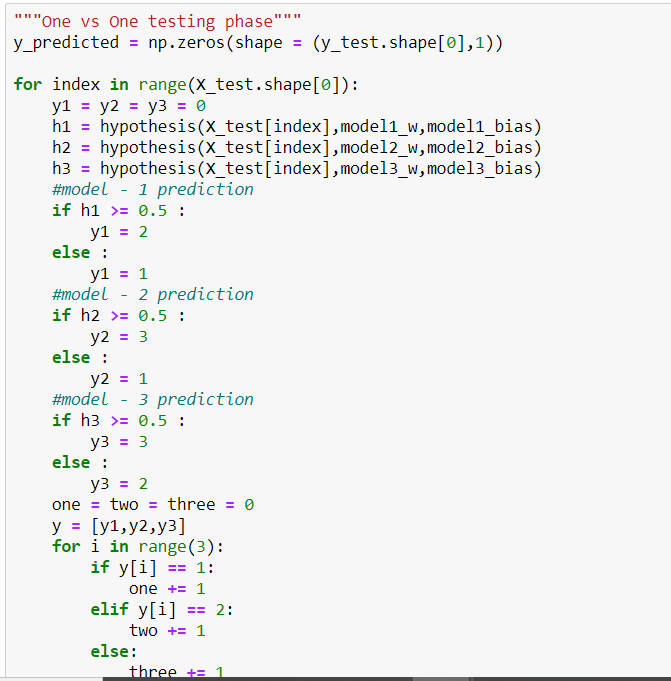


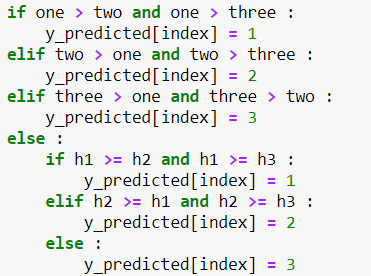
One Vs One

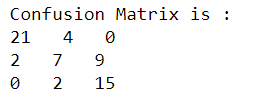


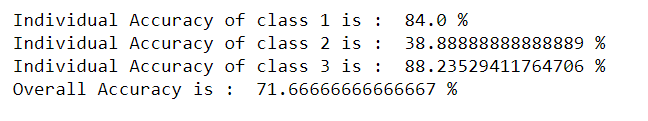




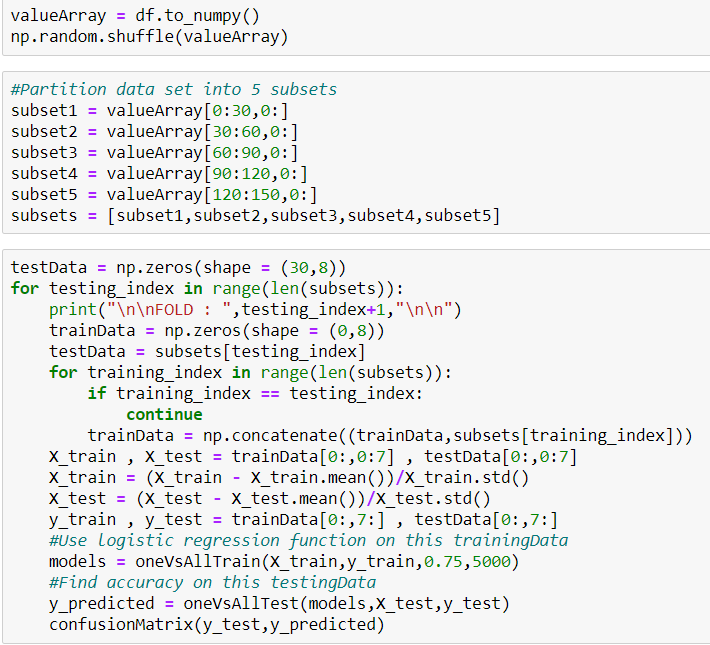


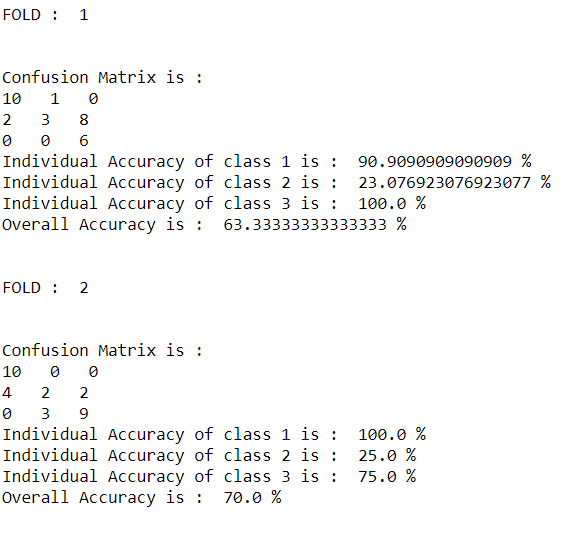


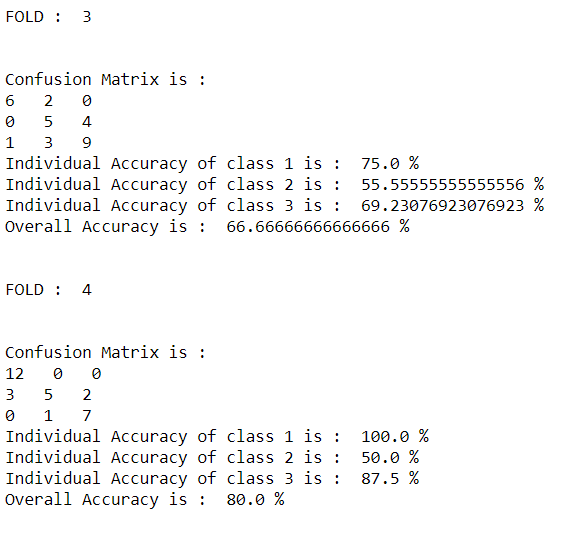


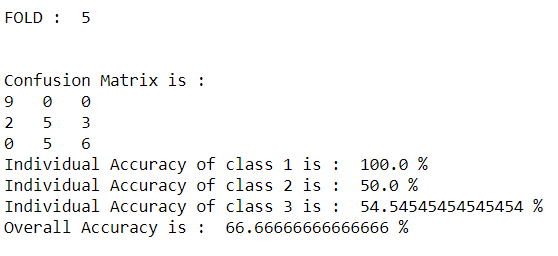


Question 9 ->

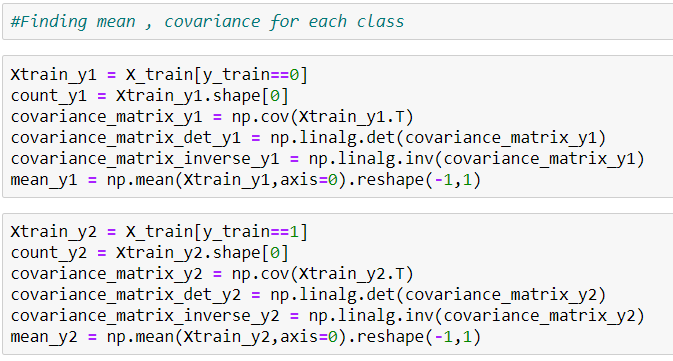


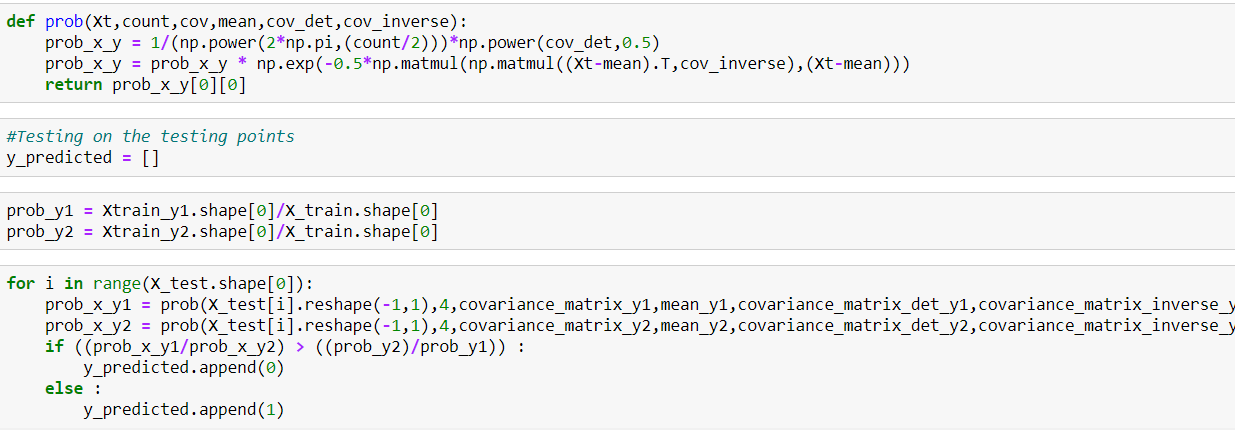




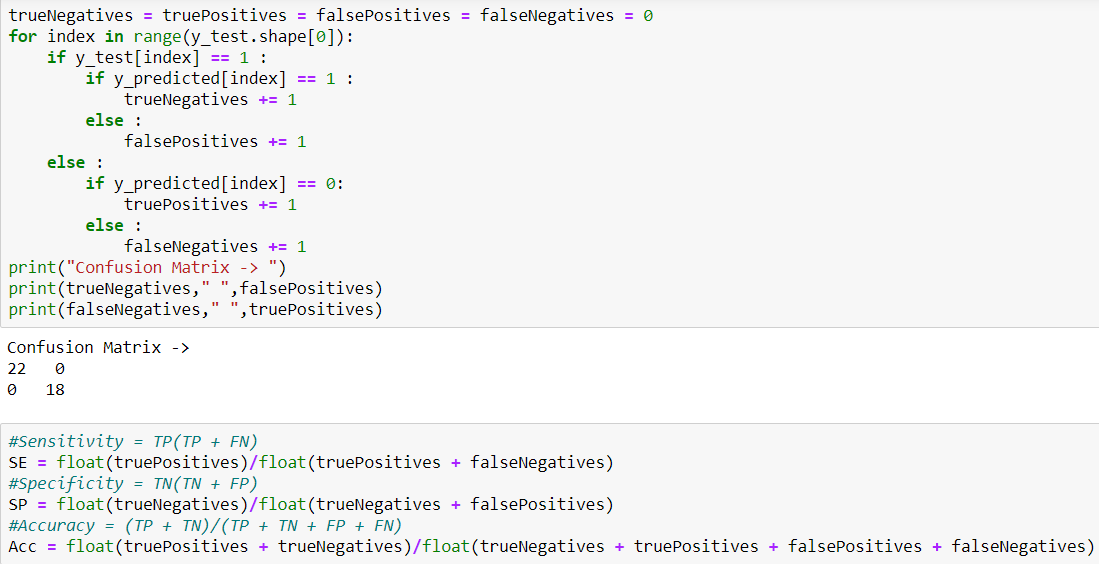


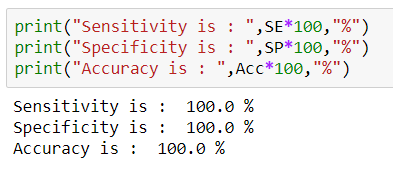
Question 10 ->



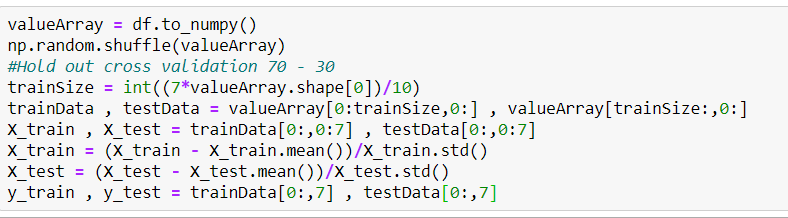


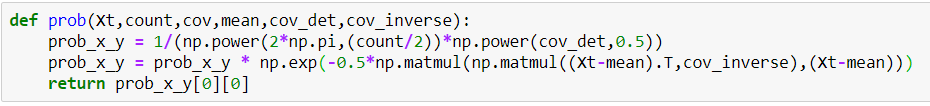
Results ->

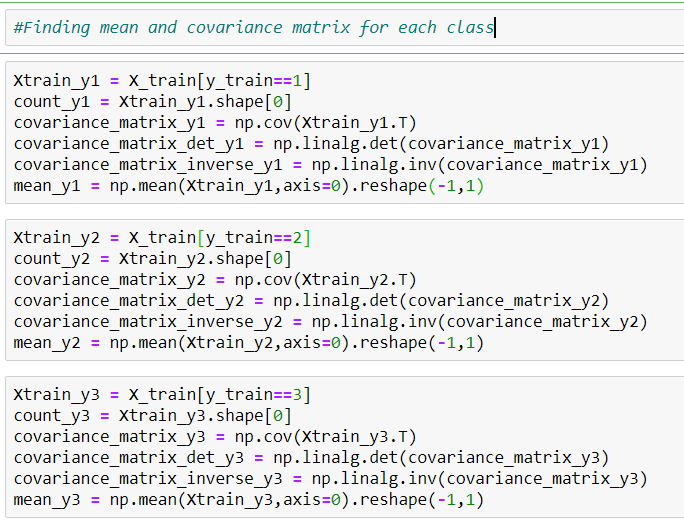


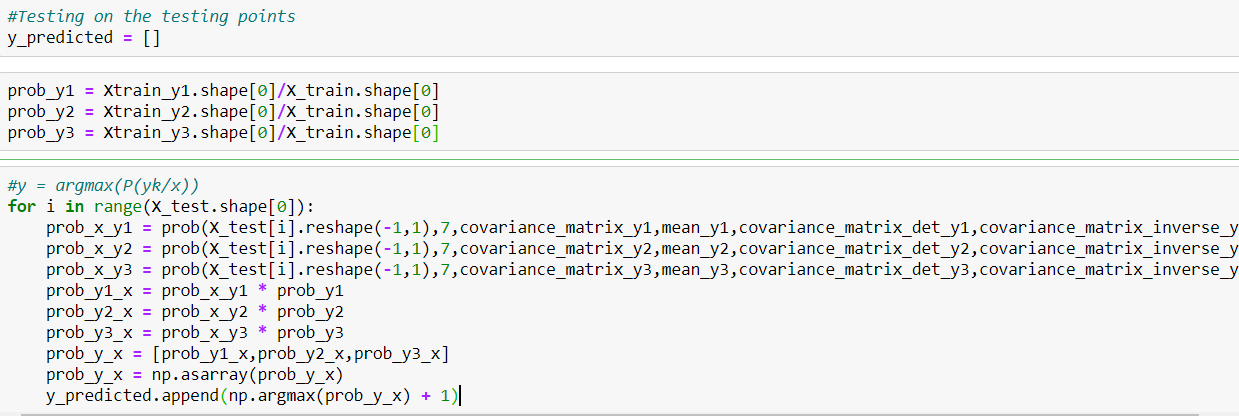


Question 11 ->

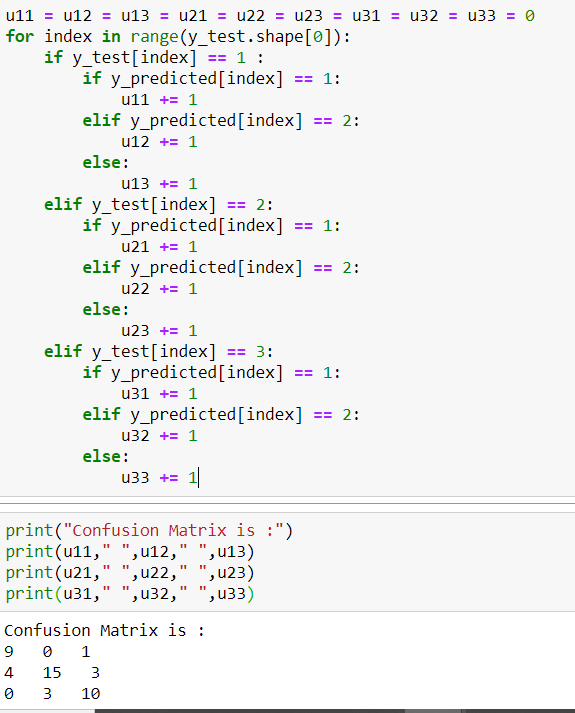


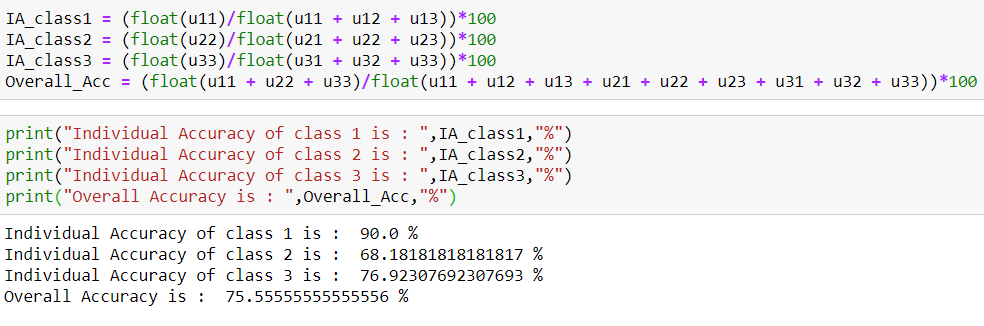






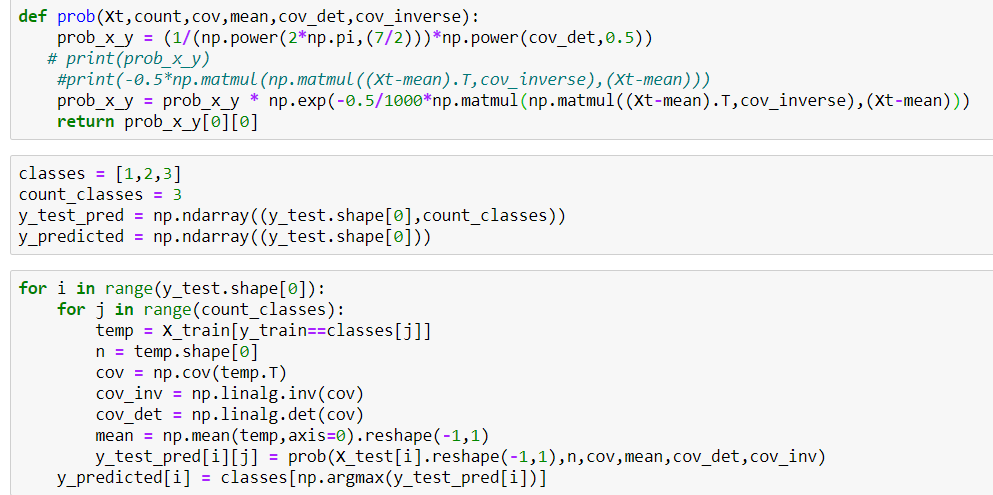
Results ->



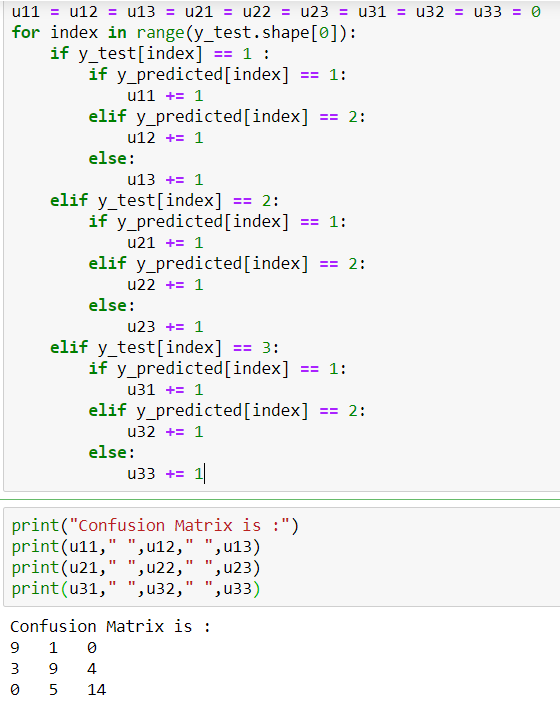


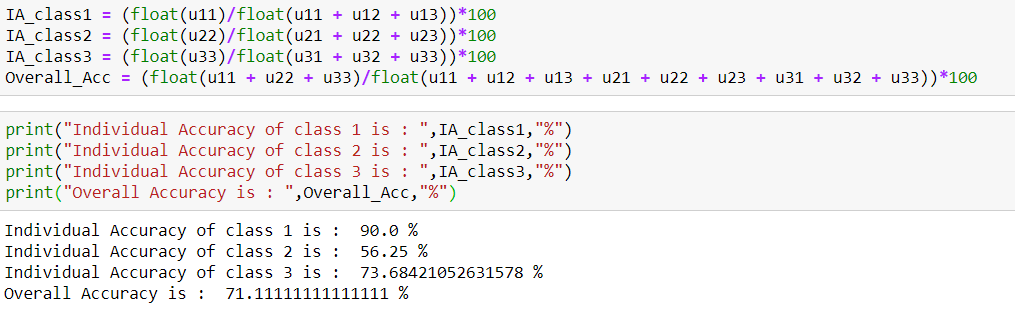
Question 12 ->





Results -





Question 13 ->

From this assignment , I learnt python from scratch and how to use libraries like numpy and pandas for effective data manipulation and matplotlib for data visualization.Also learnt how to implement linear regression , logistic regression using various methods from scratch without using TensorFlow or scikit.  
Learnt lot of things which I didn’t learn during theory since ML is not just about theory but rather if we implement the algorithms we learn more about it.

So I thank you sir for providing this assignment , certainly a challenging one but learnt a lot which definitely I wouldn’t have learnt from youtube or udemy course.