Topic 2:

I have coded in python 3.5.0 using spyder IDE

I first found correlation coefficient and it came out to be -0.75967465843

From which it is not a linear correlated.

So we checked nonlinear correlation by using polynomial regression.

Got the R scores as

Degree	R score
1	0.57710558666090117
2	0.60864917526760276
3	0.609234412881

So maximum R score is for 3rd order

We can say that they are non linearly correlated with order 3 with R score of 0.609234412881