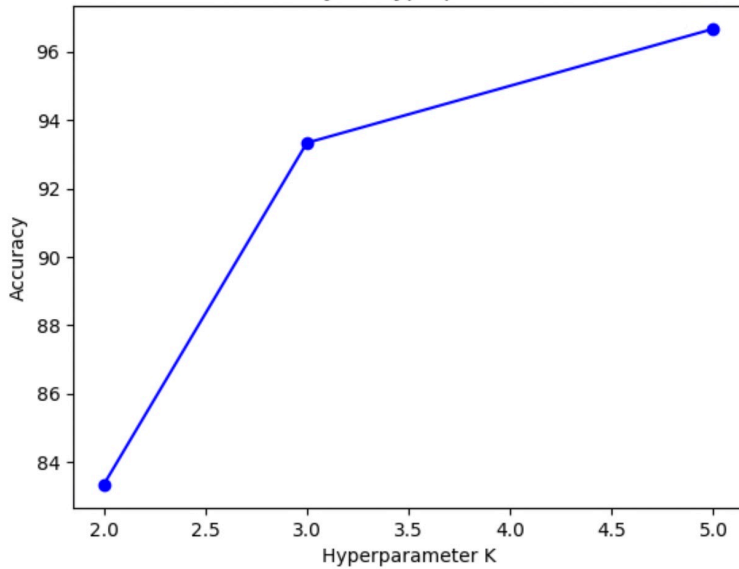




Accuracy vs Hyperparameter k



For K= [2, 3, 5] Accuracy values= [0.8333333333333334, 0.9333333333333333, 0.9666666666666667]  
Best parameter k based on maximum accuracy: 5

For Noise percentages= [2, 3, 5] Accuracy values= [40.0, 16.666666666666664, 46.666666666666664, 16.666666666666664]

Therefore, based on our analysis, we conclude that Naive Bayes exhibits a naivety in its approach and suffers from a significant bias problem. It is evident that its performance is subpar, with notably low accuracy rates even under a 10% noise scenario. Surprisingly, under a noise level as high as 80%, it achieves a relatively higher accuracy of up to 40%, which defies conventional expectations. Consequently, Naive Bayes demonstrates its inherent naivety in handling noise and bias.