Problem Statement VII

1. Implement the Naïve Bayes Classifier on the below given dataset. Test record for the given dataset is (Rainy, Cool, Normal, True). Also test the same on a large dataset with a sample test record.

	OUTLOOK	TEMPERATURE	HUMIDITY	WINDY	PLAY GOLF
0	Rainy	Hot	High	False	No
1	Rainy	Hot	High	True	No
2	Overcast	Hot	High	False	Yes
3	Sunny	Mild	High	False	Yes
4	Sunny	Cool	Normal	False	Yes
5	Sunny	Cool	Normal	True	No
6	Overcast	Cool	Normal	True	Yes
7	Rainy	Mild	High	False	No
8	Rainy	Cool	Normal	False	Yes
9	Sunny	Mild	Normal	False	Yes
10	Rainy	Mild	Normal	True	Yes
11	Overcast	Mild	High	True	Yes
12	Overcast	Hot	Normal	False	Yes
13	Sunny	Mild	High	True	No

2. Implement the Nearest Neighbour Classifier on the below given Kaggle dataset with k=7. You are free to use built-in packages for implementation.

https://storage.googleapis.com/kagglesdsdata/datasets/9590/13660/fruit_data_with_colors.txt?X-Goog-Algorithm=GOOG4-RSA-SHA256&X-Goog-Credential=gcp-kaggle-com%40kaggle-161607.iam.gserviceaccount.com%2F20220401%2Fauto%2Fstorage%2Fgoog4_request&X-Goog-Date=20220401T083142Z&X-Goog-Expires=259199&X-Goog-SignedHeaders=host&X-Goog-Signature=82d3ada0135ce1f25984b6d2f22cd3ee4fea473bc7a3dbf3af65da9b613e8a1d62a924b17d20b22c04fc0a2ae0fee77df58d89a36b610863538258df175f78c7ff7723dedf46c2714473101954d2fbf658f61aac989bb9d5cab75607443b770d10a36dd557bc6f5911bbcf024aa574d604506cb0022521f92df62fcb514fa35f41b80a53e96faa6f05c4d426d52b8640e94c85c45f6e0d04548c3173b05564f20943f36af846ce61bb016a825b93ea9d59c88d4e41641f6f10bd2be6f31086be1d31c7ba80bfdfe7c960462b93ed9bd23c70c283283f22131ade62e76b2887c896114e18c0520fbe7fa7d27724f10c85a4499370c94ad078a5afa4654876e2df