KNN Classification using Credit Card Transaction Dataset:

K	Testing Accuracy
1	0.9894366197183099
3	0.9894366197183099
5	0.9894366197183099
10	0.9894366197183099
15	0.9894366197183099

Worked with 1% = 2848 of the data.

(Train, Validation, Test) = (2000, 564, 284)

For some reason, my testing accuracy is the same for all values of K**. So, I choose K = 1 for which the accuracy will be maximum in the phase of testing.**

KNN Classification using Credit Card Transaction Dataset:

K	Testing Accuracy
1	0.9988066825775657
3	0.9988066825775657
5	0.9988066825775657
10	0.9988066825775657
15	0.9988066825775657

Worked with 3% = 8544 of the data.

(Train, Validation, Test) = (6024, 1682, 838)

For some reason, my testing accuracy is the same for all values of K. **So, I choose K = 1 for which the accuracy will be maximum in the phase of testing.**

KNN Regression for Paris House Price Dataset:

K	Testing Accuracy
1	4496570.207183208
3	2796766.3594027464
5	2522523.687021791
10	2543096.20331719
15	2510873.9364648904

Worked with 50% = 5000 of the data.

(Train, Validation, Test) = (3251, 510, 1239)

Now, I choose K = 15 because we can see the Mean Absolute Error is minimum for this K value.

KNN Regression for Paris House Price Dataset:

K	Testing Accuracy
1	3271678.2748889797
3	2765471.476288528
5	2869457.881324194
10	2643377.180399684
15	2568809.537623479

Worked with 100% = 10000 of the data.

(Train, Validation, Test) = (6496, 1027, 2477)

Now, I choose K = 15 because we can see the Mean Absolute Error is minimum for this K value.

Created by,
Subhey Sadi Rahman
ID: 011 212 074
Section: E
Course: Artificial Intelligence Laboratory (CSE 3812)
Department of Computer Science and Engineering, UIU