Lab 4; KNN(K Nearest Neighbours)

· Consider the following detest, for K=3 and test data (X,35,100) as (Person, Age, Solary K) & predict the target.

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		Salary K	Distance(d)	Rank	Target
Person	Age	Sarate of 1	F 0 0		
A without	18	50	52.82.	A F - Court	107
В	23	55	100 +46,6	drice cold	No. ()
C	24	20 1000	ni to 31.9	2 1010	
D	ч	60	11 10140.4		
E	43	70	31.1	deal III There	cy in
F	38	40 100	60.1	he Acces	bola li

The accuracy is fairly good. It sufficiently Distance (d) = \((\alpha_2 - \alpha_1)^2 + (\gamma_2 - \gamma_1)^2 x2, y2= (35,100)

$$d_1 = \sqrt{(35-18)^2 + (100-50)^2} = 52.8$$

$$d_2 = \sqrt{(35-23)^2 + (100-55)^2} = 46.6$$

Step 2: Identity 3 Nearest Neighbours.

- lezane (31.9, W) was the sequential xlotters rolling to so
 - 3. D (40.4, 4) and bound to so this beauties

Step): Majority voting barrens

Since 2 out of 3 belong to class 'Y' : the predicted class (target) for X (35,100) is "Y"

I to work believed to helicary.

For iris dataset: Random Forests; How to choose the K value! paccuracy rate approach:

Ne train the model with diff K values and colculate. the accuracy for each k. de to dos grising priores 2) Error Rate Approach: they form a strong learner. Error Rate = 1 - Accuracy. pemonstration of Accuracy Rate; & Error Rate? 19142000 . 1 may lead to overfitting. , Small K values sampling with . Large K values sides T. 8 Provided bus stable to tech of gride that it has provided to propose of Feature Scaling of death to have a feature Scaling of the range of a propose of Feature Scaling of the range of a propose of Feature Scaling is used to normalize the range of sugger and proposed it was a proposed to provide the range of the range of sugger and proposed to provide the range of the 4. Prediction: 1. Standardization X scaled = The Standardization of standardization of scaled - The scaled -. Once the ton y - means
y - standard deviation

Standard deviation

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