	- Commence of the Commence of
KNN - K- Nearest Neighbourt	For itis
	- Hoes to
Consider the following dutaset, for K=3 and test duta) Accurace
A Day of Day of Day	K value
target.	2) Error R
	- A lowe
Person Age Salaryk Target Distance	
A 18 50 N 52.8.	pemonstradi
B 23 55 N 46-6	- small K
E 24 70 N. 31.9 @	- large
D 4 60 7 40.9 3	101.9
E 43 70 Y 3011 0	
F 38 40 Y 60.1	For Diab
X 35 100?	i) What i
Harris Bar yant says par bar year Sassan town	- Fentar
	independ
1) Distance = V(x2-x)2 + (y2-y)2	
d= 1(35-18)2+(100-50)2 = 52-8	2) How do
$\frac{d_2 2 \sqrt{(3r-23)^2 + (100-51)^2} - 46.6}{d_2 = \sqrt{(2r-2)^2 + (100-51)^2} - 31.6}$	-> Etando
dz= 1(35-24)2+(100-70)2= 31,9	
d2 = (35-4)2+ (100-60)2 = 40-4	u 4 mear
2) 1) E (260 141)	und who
A STATE OF THE PROPERTY OF THE PARTY OF THE	
2) C (31.9, N)	
30 (40.9, Y)	
3) Majority -> Y (2/3)	
2) X,85,100; X	
The state of the s	
City of the city o	

+ 1 1 m

for Iris dataset! -Hoes to choose the K value? paccuracy rate approach : we train the model with dift K value and calculate the accuracy for each k 2) Error Rate Approach: Error Rate = 1 - Accuracy - A lower error rate indicates a better kvalues. pemonstration of accuracy rate and error rate: - small K values may lead to overfitting - large K values may lead to underfitting For Diabetes Dataset: i) What is the purpose of feature scaling? - Feature scaling is used to normalize the range of independent variables. 2) How do perform feature scaling? -1 Standardization X scaled = K-11. u - mean 15 - standard deviction. und when duta follows a normal distribution