**following:**

**threshold=0.5**

True if the answer is greater than threshold

|  |  |  |
| --- | --- | --- |
| **Sample #** | **Predicted Output** | **Actual Output** |
| 1 | 0.01 | 1 |
| 2 | 0.9 | 0 |
| 3 | 0.45 | 0 |
| 4 | 0.49 | 1 |
| 5 | 0.76 | 1 |
| 6 | 0.66 | 0 |
| 7 | 0.55 | 1 |
| 8 | 0.3 | 1 |
| 9 | 0.28 | 0 |
| 10 | 0.8 | 1 |
|  |  |  |

1. Accuracy
2. Precision
3. Recall
4. TPR
5. FPR
6. Senstivity
7. F\_Score

ROC Curve for threshold 0.7 and 0.5

Which threshold is better

Code for every part

**Question2:**

**Threshold >=0.5**

|  |  |  |
| --- | --- | --- |
| x | Y(for logistic) | y |
| k 0.7 |  | 2 |
| 1 |  | 5 |
| 0.1 |  | 7 |
| 0.55 |  | 2 |
| 0.8 |  | 9 |
| 0.33 |  | 1 |
| 0.98 |  | 8 |
| 0.45 |  | 1 |
| 2.7 |  | 3 |
| 0.01 |  | 7 |
| 1.11 |  | 0 |
|  |  |  |

1. Entropy
2. Weighted Entropy
3. PCA
4. Gradient descent for 5 itertion,alpha=0.02
5. Kmean
6. Linear regression
7. Logistics regression
8. Remove outliers
9. Remove noisy data
10. SSR
11. SST
12. SSE
13. R^2
14. Variance

Cause ,Effects and prevention of:

1. Overfitting
2. Underfitting
3. High variance
4. Less accuracy
5. High biasness
6. Less Variance
7. More Error

**Questions 3: Code for every damn thing you have calculated above .**

**Saloun sara solve karlena mehnat se banaya hai mein ne**

**Will discuss all our answers on discord after Isha**