## **Sigmoid Evaluation**

How do you check the performance

1. Consider the following test data

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | phone1 | phone2 | phone3 | phone4 |
| Launch (within 6 months) x1 | 1 | 0 | 0 | 1 |
| Weight (g) x2 | 0.2 | 0.73 | 0.6 | 0.8 |
| Screen Size (< 5.9in) x3 | 0.2 | 0.7 | 0.8 | 0.9 |
| Dual sim x4 | 0 | 1 | 0 | 0 |
| Internal mem(>= 64gb, 4gb ram) x5 | 1 | 0 | 0 | 0 |
| NFC x6 | 0 | 0 | 1 | 0 |
| Radio x7 | 1 | 1 | 1 | 0 |
| Battery (mAh) x8 | 0.83 | 0.96 | 0.9 | 0.2 |
| Price? (k) x9 | 0.34 | 0.4 | 0.6 | 0.1 |
| Liked (y) | 0.17 | 0.67 | 0.9 | 0.3 |
| Predicted(ŷ) | 0.24 | 0.67 | 0.9 | 0.3 |

1. Calculate the Root Mean Square Error
2. Here, RMSE = 0.311, the smaller the better
3. For classification problems, set a threshold ε, such that
   1. (y|< ε) = 0
   2. (y|>= ε) = 1