## **Lab - Logistic Regression**

# Q1. Sigmoid function

- Find the values of the sigmoid function for values of x from -5 to 5 in steps of 1.
- Plot these values on a graph.

### Q2.

- Fit a LogisticRegression model for the cancer data set.
- Find the accuracy and confusion matrix.

#### Q3.

- Fit a LogisticRegression model for the iris data set.
- Find the accuracy and confusion matrix.
- Use model.predict\_proba(X\_test) to get probabilities and print them out.

### Q4.

- Fit a LogisticRegression model for the credit data set.
- Find the accuracy and confusion matrix.

Remember X = pd.get dummies(X) to one hot encode the data.