MACHINE LEARNING

1. (A)Least square Error

2. (A)Linear regression is sensitive to outliers

3. (B)Negative

4. (B)Correlation

5.(C)Low bis and high variance

6.(B)Predictive modal

7.(D)Regularization

8.(D)SMOTE

9.(A)TPR and FPR

10.(B)False

11.(A)Cpnstruction beg of fords from an email

12.(B)It becomes slow when number of features is very large

13.Regularization is a technique used to prevent overfitting in machine learning models by adding a penalty term to the objective function.it discourages overly complex models

14.Lasso and Ridge regression are algorithms used for regularization

15.The error in linear regression equation refers to the difference between the predicted values and the actual values of the dependent variables

PYTHON WORKSHEET

1.(C)%

2.(B)0

3.(C)24

4.(D)0

5.(A)2

6.(C)the finally block will be executed no matter if the try block raises an werror or not

7.(A)it is used to raise an exception

8.(C)in defining a generator

9.(A)_abc,(C)abc2

10.(A)yield,(B)raise

STATISTICS WORKSHEET

1.(aTrue

2.(a)Central Limit Theorem

3.(b)Modelling bounded count data

4.(c)The square of a standard normal random variable follows what is called chi squared distribution

5.(c)Poisson

6.(b)false

7.(b)Hypothesis

8.(a)0

9.(c)Outilers cannot conform to the regression relationship

10.Normal Distribution:

Normal distribution also known as Gaussian distribution is a symmetric probability distributio characterized by its bell shaped curve.in a normal distribution the mean, the mode, and the median, are equal and the distribution is completely defined by its mean and standard deviation

11.Handling Missing Data And Imputation Techniques:

Handling missing data involves either removing or imputing the missing values. Imputation techniques include mean imputation , mode imputation. And more advanced methods like k Nearest Neighbours (KNN) imputation or multiple imputation

12.A/B Testing:

A/B Testing is a statistical method used in marketing and product developement to compare two versions (A and B) of a variable determines which performs better. It involves splitting a sample into two groups exposing each group to the different versions analyzing results to make the data driven decisons

13.Mean imputation of Missing Data:

Mean imputation involves replacing missing data values and with the mean of the observed values for that variable. While its a simple method ,it may introduces bias, especially if msissingness is not random . It should be cautiously and other imputation methods should be considered

14.Linear Regression in Statistics:

Linear regression is a statistical metod used to the model relationship between a dependent variale and one or more independent variables . The relationship by a linear equation , where coefficients indicate the strength and direction of relationships.

15.Branches of statistics:

Statistics comprises several branches , including descriptive statistics(summerizing and presenting), inferential statistics (drawing conclusions from data)