LOGISTIC REGRESSION ASSIGNMENT QUIZ BC=220708

How many types of occupations do we have?

Marked Answer:

14

MARKS OBTAINED \$\forall 1 TOTAL MARKS: 1

How many people are working as tech support and have an annual income greater than 50k?

Marked Answer:

283

MARKS OBTAINED **✓** 1 TOTAL MARKS : 1

How many total missing values are present in the dataset?

Marked Answer:

4262

MARKS OBTAINED **✓** 1 TOTAL MARKS : 1

If there are missing values in the Marital Status column, which option among the following should be used for replacing the missing values:

Marked Answer:

Mode

MARKS OBTAINED **✓** 1 TOTAL MARKS: 1

How many people are having private work classes and are not from the United States of America?

Marked Answer:

2151

MARKS OBTAINED **✓** 1 TOTAL MARKS: 1

How many people are either having Annual Income(last column) less than or equal to 50k or their working hours is greater than or equal to 40 hrs:

Marked Answer:

29505

Which of the following methods can you use for handling outliers? Marked Answer: Both of the above methods MARKS OBTAINED **✓** 1 TOTAL MARKS : 1 Chi-square is used to analyze: Marked Answer: both 1 and 2 MARKS OBTAINED * 1 TOTAL MARKS: 1 What is VIF? Marked Answer: It can detect multicollinearity MARKS OBTAINED * 1 TOTAL MARKS: 1 What predict_proba will tell you? Marked Answer: It will predict the class probabilities MARKS OBTAINED **1** TOTAL MARKS: 1 Logistic regression is useful for regression problems: Marked Answer: False MARKS OBTAINED * 1 TOTAL MARKS: 1 In logistic regression, if the predicted logit is 0, what's the transformed probability? Marked Answer:

0.5

MARKS OBTAINED **✓** 1 TOTAL MARKS : 1

Which variant of logistic regression is recommended when you have a categorical dependent variable with more than two values?

Marked Answer:

Multinomial logistic regression

Perform the following tasks for answering the remaining questions

Rename the last column as Annual Income

Remove the missing values from the dataset

Change the labels of categorical data into numerical data using Label Encoder.

Split the dataset into a train and test of proportions 70:30 and set the random state to 0.

Build a Logistic Regression Model on the data.

Answer the following questions with the help of the above-created model.

What is the model's precision when the target is False?

Marked Answer:

0.70 to 0.80

MARKS OBTAINED **✓** 1 TOTAL MARKS : 1

Perform the following tasks for answering the remaining questions

Rename the last column as Annual Income

Remove the missing values from the dataset

Change the labels of categorical data into numerical data using Label Encoder.

Split the dataset into a train and test of proportions 70:30 and set the random state to 0.

Build a Logistic Regression Model on the data.

Answer the following questions with the help of the above-created model.

What is the total support value from the above model?

Marked Answer:

9049

MARKS OBTAINED

1

TOTAL MARKS: 1

Perform the following tasks for answering the remaining questions

Rename the last column as Annual Income

Remove the missing values from the dataset

Change the labels of categorical data into numerical data using Label Encoder.

Split the dataset into a train and test of proportions 70:30 and set the random state to 0.

Build a Logistic Regression Model on the data.

Answer the following questions with the help of the above-created model.

What is the accuracy score of the above model?

Marked Answer:

0.70 to 0.85

MARKS OBTAINED **✓** 1 TOTAL MARKS : 1

Perform the following tasks for answering the remaining questions

Rename the last column as Annual Income

Remove the missing values from the dataset

Change the labels of categorical data into numerical data using Label Encoder.

Split the dataset into a train and test of proportions 70:30 and set the random state to 0.

Build a Logistic Regression Model on the data.

Answer the following questions with the help of the above-created model.

What is the specificity of the above model?

Marked Answer:

0.20 to 0.30

MARKS OBTAINED **✓** 1 TOTAL MARKS: 1

Perform the following tasks for answering the remaining questions

Rename the last column as Annual Income

Remove the missing values from the dataset

Change the labels of categorical data into numerical data using Label Encoder.

Split the dataset into a train and test of proportions 70:30 and set the random state to 0.

Build a Logistic Regression Model on the data.

Answer the following questions with the help of the above-created model.

What is the f1 score of the above model when the target is True?

Marked Answer:

0.30 to 0.40

MARKS OBTAINED ✓ 1 TOTAL MARKS: 1

Perform the following tasks for answering the remaining questions

Rename the last column as Annual Income

Remove the missing values from the dataset

Change the labels of categorical data into numerical data using Label Encoder.

Split the dataset into a train and test of proportions 70:30 and set the random state to 0.

Build a Logistic Regression Model on the data.

Answer the following questions with the help of the above-created model.

How many records are correctly classified by the model?

Marked Answer:

7173

MARKS OBTAINED

✓ 1 TOTAL MARKS: 1