Graded Review Questions

Graded Review Questions Instructions

1. Time allowed: **Unlimited**
   - We encourage you to go back and review the materials to find the right answer
   - Please remember that the Review Questions are worth 50% of your final mark.
2. Attempts per question:
   - One attempt - For True/False questions
   - Two attempts - For any question other than True/False
3. Clicking the "**Final Check**" button when it appears, means your submission is **FINAL**. You will **NOT** be able to resubmit your answer for that question ever again
4. Check your grades in the course at any time by clicking on the "Progress" ta

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Question 1

1/1 point (graded)

Let `X` be a dataframe with 100 rows and 5 columns. Let `y` be the target with 100 samples. Assuming all the relevant libraries and data have been imported, the following line of code has been executed:

```
LR = LinearRegression()
```

```
LR.fit(X, y)
```

```
yhat = LR.predict(X)
```

How many samples does `yhat` contain?

- 5
- 500
- 100
- 0

Submit You have used 2 of 2 attempts

✔ Correct (1/1 point)

Question 2

1/1 point (graded)

What value of R^2 (coefficient of determination) indicates your model performs best?

- -100
- -1
- 0
- 1

Submit You have used 2 of 2 attempts

✔ Correct (1/1 point)

Question 3

1/1 point (graded)

Which statement is true about polynomial linear regression?

- ○ Polynomial linear regression is not linear in any way.
- ◉ Although the predictor variables of polynomial linear regression are not linear, the relationship between the parameters or coefficients is linear.
- ○ Polynomial linear regression uses wavelets.

✔

Submit You have used 2 of 2 attempts

✔ Correct (1/1 point)

Question 4

1/1 point (graded)

The larger the mean squared error, the better your model performs:

- ◉ False
- ○ True

✔

Submit You have used 1 of 1 attempt

✔ Correct (1/1 point)

Question 5

1/1 point (graded)

Assume all the libraries are imported. y is the target and X is the features or dependent variables. Consider the following lines of code:

```
Input=[('scale',StandardScaler()),('model',LinearRegression())]

pipe=Pipeline(Input)

pipe.fit(X,y)

ypipe=pipe.predict(X)
```

What is the result of ypipe?

- ○ Polynomial transform, standardize the data, then perform a prediction using a linear regression model.
- ● Standardize the data, then perform prediction using a linear regression model.
- ○ Polynomial transform, then standardize the data.

✔

Submit

You have used 2 of 2 attempts

✔ Correct (1/1 point)