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

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 1 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 1 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 1 of 2 attempts

✔ Correct (1/1 point)

Question 4

1/1 point (graded)

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

- [x] 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.
- [x] Standardize the data, then perform prediction using a linear regression model.
- [ ] Polynomial transform, then standardize the data.

Submit You have used 1 of 2 attempts

✔ Correct (1/1 point)