

Model Development

TOTAL POINTS 6

1. What does the following line of code do?

1 point

```
1 lm = LinearRegression()
```

- ☐ Fit a regression object lm
- ☒ Create a linear regression object
- ☐ Predict a value

2. What steps do the following lines of code perform?

1 point

```
1 Input=[('scale',StandardScaler()),('model',LinearRegression())]  
2  
3 pipe=Pipeline(Input)  
4  
5 pipe.fit(Z,y)  
6  
7 ypipe=pipe.predict(Z)
```

- ☐ Standardize the data, then perform a polynomial transform on the features **Z**
- ☐ Find the correlation between **Z** and **y**
- ☒ Standardize the data, then perform a prediction using a linear regression model using the features **Z** and targets **y**

3. We create a polynomial feature as follows "**PolynomialFeatures(degree=2)**"; what is the order of the polynomial?

1 point

- ☐ 0
- ☐ 1

☒ 2

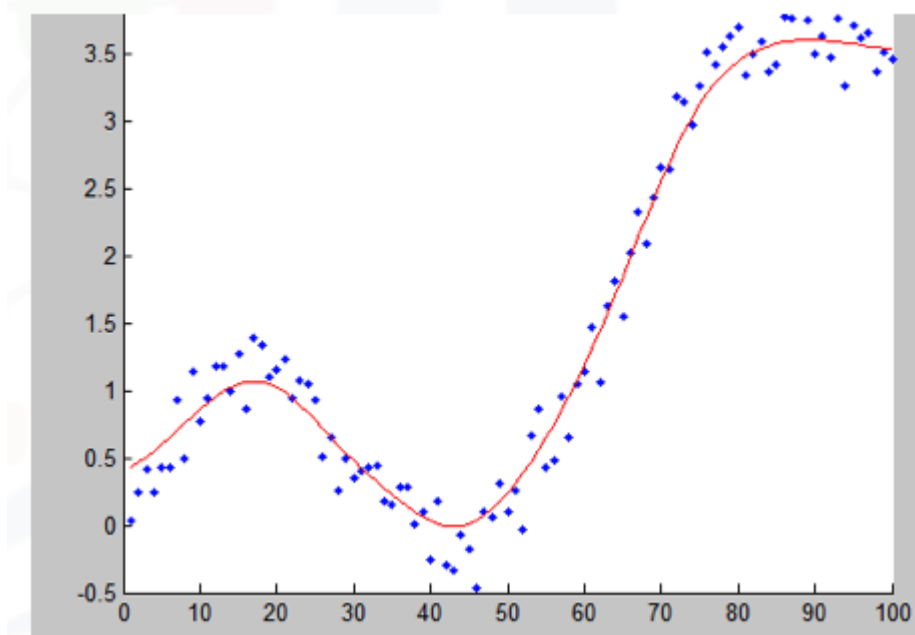
4. What value of R^2 (coefficient of determination) indicates your model performs best?

1 point

☐ -1☒ 1☐ 0

5. Consider the plot of one independent and one dependent variable. This is an example of what?

1 point

☐ Polynomial Regression☒ Linear Regression☐ Multiple Linear Regression

6. Consider the following equation:

1 point

$$y = b_0 + b_1 x$$

What is the parameter **b₀** (b subscript 0)?

- ☐ The predictor or independent variable
- ☐ The target or dependent variable
- ☒ The intercept
- ☐ The slope

☐

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