Final Presentation

X and Y

```
[27] X = data[["age","balance","day"]].copy()

[28] Y = data["duration"]
```

Train Test split and model

```
[29] from sklearn.linear_model import LinearRegression
```

```
[30] model = LinearRegression()
```

```
[31] from sklearn.model_selection import train_test_split
```

```
[33] X_train, X_test, y_train, y_test = train_test_split(X,Y,test_size=0.3,random_state=1)
```

```
[34] model.fit(X_train,y_train)
```

```
LinearRegression()
```

```
[35] model.predict(X_test)
```

```
array([261.63366483, 264.03917216, 267.71435114, ..., 274.24313072,
       258.78076605, 259.82857804])
```

```
[36] model.coef_
```

```
array([ 0.11561261, -0.00191192, -0.89782235])
```

Model Performance

```
[37] predictions = model.predict(X_test)

[38] from sklearn.metrics import mean_squared_error
     import numpy as np

[39] np.sqrt(mean_squared_error(y_test,predictions))

     267.19629183361286
```