PREDICTIVE MODELING WITH LINEAR REGRESSION

In [7]:
```
import numpy as np
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LinearRegression
from sklearn.metrics import mean_squared_error
```

In [8]:
```
np.random.seed(0)
X = 2 * np.random.rand(100, 1)
y = 4 + 3 * X + np.random.randn(100, 1)
```

In [9]:
```
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42
```

In [10]:
```
model = LinearRegression()
model.fit(X_train, y_train)
y_pred = model.predict(X_test)
```

In [11]:
```
mse = mean_squared_error(y_test, y_pred)
print("Mean Squared Error:",mse)
```

```
Mean Squared Error: 0.9177532469714291
```

In [ ]: