```
# 1.) Importing the neccessary files.
import pandas as pd
from sklearn.linear_model import LinearRegression
```

```
# 2.) Loading the dataset.
df = pd.read_csv("/content/cleaned_student_data.csv")
```

```
# 3.) Converting the categoricals to numericals.
for col in df.columns:
    if df[col].dtype == 'object':
        df[col] = df[col].astype('category').cat.codes
```

```
# 4.) Features & targets.
X = df.iloc[:, :-1]
y = df.iloc[:, -1]
```

```
# 5.) Training the model.

model = LinearRegression()
model.fit(X, y)
```

▾ LinearRegression

```
LinearRegression()
```

```
# 6.) Predictions and model evaluation.
predictions = model.predict(X)

print(" 🔹 Sample Predictions:")
print(predictions[:10])

print("This AI model predicts student performance based on study patterns.")
print("It can help students improve academic outcomes using data-driven insights.")

print("This project can be deployed on Microsoft Azure using Azure Machine Learning")
print("to create an online student performance prediction system.")
```

```
 🔹 Sample Predictions:
[2.16048131 1.89271024 5.05983492 3.05484845 3.81824893 1.84887363
 2.32902108 3.81932905 2.1343752  1.42199456]
This AI model predicts student performance based on study patterns.
It can help students improve academic outcomes using data-driven insights.
This project can be deployed on Microsoft Azure using Azure Machine Learning
to create an online student performance prediction system.
```