```python
'''problem Statement: 'predict a student final exam score based on the
number of hours they study'''

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# Import necessary libraries
import numpy as np
import pandas as pd
from sklearn.model_selection import train_test_split  # correct
from sklearn.linear_model import LinearRegression      # correct

# Example usage:
# X_train, X_test, y_train, y_test = train_test_split(X, y,
test_size=0.2, random_state=42)
# model = LinearRegression()
# model.fit(X_train, y_train)
```

```
  Cell In[2], line 1
    data=('Hours_study':[,2,3,4,5,6,7,8,9,10],'Exam_score':
[50,60,70,75,80,85,90,92,95]')

^
SyntaxError: unterminated string literal (detected at line 1)
```

```python
import pandas as pd

# Step 2: Create dataset
data = {
    'Hours_study': [2, 3, 4, 5, 6, 7, 8, 9, 10],
    'Exam_score': [50, 60, 70, 75, 80, 85, 90, 92, 95]
}

# Convert to DataFrame
df = pd.DataFrame(data)

# Display the DataFrame
print(df)
```

```
   Hours_study  Exam_score
0            2          50
1            3          60
2            4          70
3            5          75
4            6          80
```

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5            7          85
6            8          90
7            9          92
8           10          95

#step 4;
X=df[['Hours_study']]
y=df[['Exam_score']]

#step 5:
# Step 5: Split the data into training and testing sets
X_train, X_test, y_train, y_test = train_test_split(X, y,
test_size=0.2, random_state=42)


# Step 6: Create Linear Regression model
model = LinearRegression()

# Step 7:
model.fit(X_train,y_train)

#step 8:
#user input testing
user_input=float(input("Enter the number of hours you study:"))

# Example user input
user_input = 1

predicted_score = model.predict(
    pd.DataFrame([[user_input]], columns=['Hours_study'])
)

print("Predicted Score:", predicted_score[0])


----------------------------------------------------------------------
-----
NameError                                 Traceback (most recent call
last)
Cell In[2], line 4
      1 # Example user input
      2 user_input = 1
----> 4 predicted_score = model.predict(
      5     pd.DataFrame([[user_input]], columns=['Hours_study'])
      6 )
      8 print("Predicted Score:", predicted_score[0])

NameError: name 'model' is not defined

print(predicted_score)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[7], line 1
----> 1 print(predicted_score)

NameError: name 'predicted_score' is not defined
```