In [ ]:

```python
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
```

In [ ]:

```python
url = 'C:\\Users\\mohit\\Desktop\\LP III\\ML\\6\\uber.csv'
df = pd.read_csv(url)
```

In [ ]:

```python
df
```

In [ ]:

```python
df.describe()
```

In [ ]:

```python
corr = df.corr()
corr
```

In [ ]:

```python
x = df['distance'].values.reshape(-1, 1)
y = df['fare_amount'].values.reshape(-1, 1)
```

In [ ]:

```python
from sklearn.preprocessing import StandardScaler
std = StandardScaler()
x = std.fit_transform(x)
y = std.fit_transform(y)
```

In [ ]:

```python
from sklearn.model_selection import train_test_split
x_train, x_test, y_train, y_test = train_test_split(x, y, test_size = 0.2)
```

In [ ]:

```python
from sklearn.linear_model import LinearRegression
lr = LinearRegression()

lr.fit(x_train, y_train)
y_pred = lr.predict(x_test)
```

In [ ]:

```python
print("train score: ", lr.score(x_train, y_train))
print("test score: ", lr.score(x_test, y_test))
```

In [ ]:

```python
from sklearn import metrics
```

In [ ]:

```python
print(metrics.r2_score(y_test, y_pred))
```

In [ ]:

```python
print(metrics.mean_squared_error(y_test, y_pred))
```

In [ ]:

```python
print(metrics.mean_absolute_error(y_test, y_pred))
```

In [ ]:

```python
print(np.sqrt(metrics.mean_squared_error(y_test, y_pred)))
```

In [ ]:

```python
df = {'actual': y_test, 'predicted': y_pred}
```

In [ ]:

```python
!pip install tabulate
```

In [ ]:

```python
from tabulate import tabulate
print(tabulate(df, headers = 'keys'))
```

In [ ]:

```python
print(lr.intercept_)
print(lr.coef_)
```