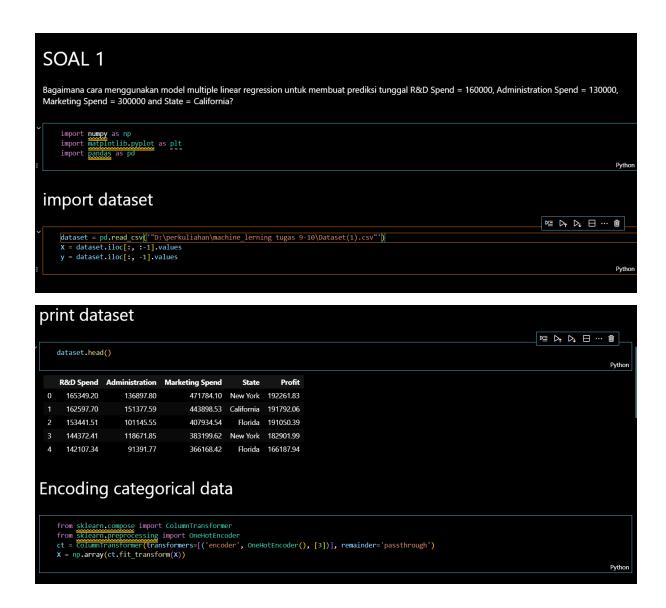
Nama :aditia rizki maulana

Nim:20220801431

Matkul :machine learning



Splitting the dataset into the Training set and Test set

```
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, random_state = 0)
```

Training the Multiple Linear Regression model on the Training set

```
from skleam.linear model import LinearRegression
regressor = LinearRegression()
regressor.fit(X_train, y_train)

Python
LinearRegression()
```

Predict Test Result

```
y_pred = regressor.predict(X_test)
np.set_printoptions(precision=2)
print(np.concatenate((y_pred.reshape(len(y_pred),1), y_test.reshape(len(y_test),1)),1))

[[103015.2 103282.38]
[132582.28 144259.4 ]
[132447.74 146121.95]
[71976.1 77798.83]
[178537.48 191050.39]
[116161.24 105008.31]
[67851.69 81229.06]
[98791.73 97483.56]
[113969.44 110352.25]
[1167921.07 166187.94]]
```

JAWABAN R&D Spend = 160000, Administration Spend = 130000, Marketing Spend = 300000 and State = 'California'

```
print(regressor.predict([[1, 0, 0, 160000, 130000, 300000]]))

[181566.92]
```

SOAL 2

Bagaimana cara mendapatkan persamaan regresi akhir y = b0 + b1 x1 + b2 x2 + ... dengan nilai akhir koefisien?

```
print(regressor.coef_)
print(regressor.intercept_)

Pytt

[ 8.66e+01 -8.73e+02 7.86e+02 7.73e-01 3.29e-02 3.66e-02]
42467.52924856474
```