Program No:6

Program to implement linear regression techniques using built in function.

Program:

```
import numpy as np
from sklearn.linear_model import LinearRegression
x=np.array([5,10,15,20,25]).reshape((-1,1))
y=np.array([1,2,3,4,5])
print(x)
print(y)
model=LinearRegression()
model.fit(x,y)
r_sq=model.score(x,y)
print('coefficient of determination:', r_sq)
print('intercept:', model.intercept_)
print('slope:', model.coef_)
y_pred=model.predict(x)
print('predicted response:' ,y_pred)
```

Output: