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In [137]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
from sklearn.tree import DecisionTreeRegressor
```

```
In [138]: data=pd.read_csv("Position_Salaries.csv")
data.head(10)
```

Out[138]:

	Position	Level	Salary
0	Business Analyst	1	45000
1	Junior Consultant	2	50000
2	Senior Consultant	3	60000
3	Manager	4	80000
4	Country Manager	5	110000
5	Region Manager	6	150000
6	Partner	7	200000
7	Senior Partner	8	300000
8	C-level	9	500000
9	CEO	10	1000000

```
In [139]: real_x =data.iloc[:,1:2].values
real_y =data.iloc[:,2].values
```

```
In [140]: reg=DecisionTreeRegressor(random_state=0)
reg.fit(real_x,real_y)
```

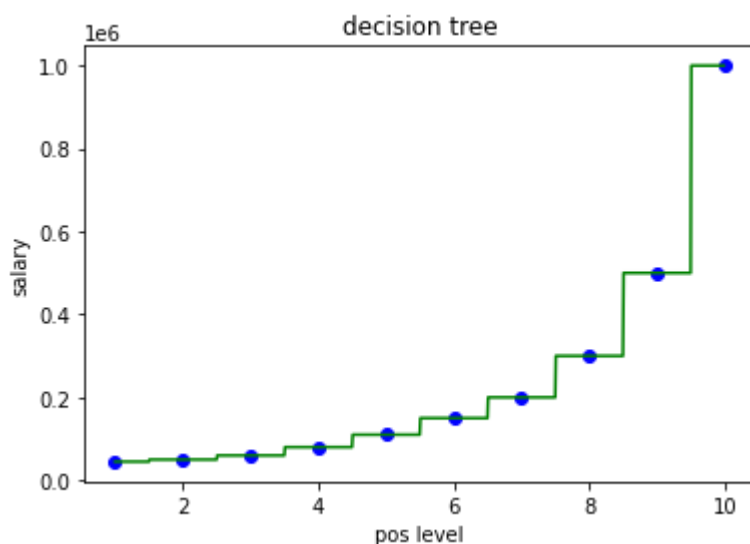
Out[140]: DecisionTreeRegressor(random_state=0)

```
In [141]: y_pred = reg.predict([[6]])
y_pred
```

Out[141]: array([150000.])

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In [143]: x_grid=np.arange(min(real_x),max(real_x),0.01)
x_grid=x_grid.reshape((len(x_grid),1))
```

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In [144]: plt.scatter(real_x,real_y,color="blue")
plt.plot(x_grid, reg.predict(x_grid),color="green")
plt.title("decision tree")
plt.xlabel("pos level")
plt.ylabel("salary")
plt.show()
```



In []:

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