In [1]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
from sklearn.ensemble import RandomForestRegressor
```

In [2]:
```
data= pd.read_csv("Position_Salaries.csv")
data.head(10)
```

Out[2]:

	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 [3]:
```
real_x= data.iloc[:,1:2].values
real_y= data.iloc[:,2].values
```

In [4]:
```
reg=RandomForestRegressor(n_estimators=100,random_state=0)
reg.fit(real_x,real_y)
```

Out[4]:
```
RandomForestRegressor(random_state=0)
```

In [5]:
```
y_pred=reg.predict([[6]])
y_pred
```

Out[5]:
```
array([142600.])
```

In [6]:
```
x_grid=np.arange(min(real_x),max(real_x),0.01)
x_grid=x_grid.reshape((len(x_grid),1))
```

In [7]:
```
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()
```