In [1]:
```python
import pandas as pd
```

In [3]:
```python
ds=pd.read_csv('DTT.csv')
ds
```

Out[3]:

	company	job	degree	salare>100k
0	google	sales executive	bachelors	$0
1	google	sales executive	masters	0
2	google	business manager	bachelors	1
3	google	business manager	masters	$1
4	google	computer programmer	bachelors	0
5	google	computer programmer	masters	1
6	abc pharma	sales executive	masters	0
7	abc pharma	computer programmer	bachelors	$0
8	abc pharma	business manager	bachelors	0
9	abc pharma	business manager	masters	1
10	facebook	sales executive	bachelors	1
11	facebook	sales executive	masters	1
12	facebook	business manager	bachelors	1
13	facebook	business manager	masters	1
14	facebook	computer programmer	bachelors	1
15	facebook	computer programmer	masters	1

In [6]:
```python
inp = ds.drop('salare>100k',axis=1)
target=ds['salare>100k']

inp
```

Out[6]:

	company	job	degree
0	google	sales executive	bachelors
1	google	sales executive	masters
2	google	business manager	bachelors
3	google	business manager	masters
4	google	computer programmer	bachelors
5	google	computer programmer	masters
6	abc pharma	sales executive	masters
7	abc pharma	computer programmer	bachelors
8	abc pharma	business manager	bachelors
9	abc pharma	business manager	masters
10	facebook	sales executive	bachelors
11	facebook	sales executive	masters
12	facebook	business manager	bachelors
13	facebook	business manager	masters
14	facebook	computer programmer	bachelors
15	facebook	computer programmer	masters

In [7]:
```python
target
```

Out[7]:
```
0      $0
1       0
2       1
3      $1
4       0
5       1
6       0
7      $0
8       0
9       1
10      1
11      1
12      1
13      1
14      1
15      1
Name: salare>100k, dtype: object
```

In [10]:
```python
from sklearn.preprocessing import LabelEncoder
comp=LabelEncoder()
job=LabelEncoder()
deg=LabelEncoder()
```

In [12]:
```python
inp['compn']=comp.fit_transform(inp['company'])
inp['jobn']=comp.fit_transform(inp['job'])
inp['degreen']=comp.fit_transform(inp['degree'])
```

In [13]:
```python
inp
```

Out[13]:

	company	job	degree	compn	jobn	degreen
0	google	sales executive	bachelors	2	2	0
1	google	sales executive	masters	2	2	1
2	google	business manager	bachelors	2	0	0
3	google	business manager	masters	2	0	1
4	google	computer programmer	bachelors	2	1	0
5	google	computer programmer	masters	2	1	1
6	abc pharma	sales executive	masters	0	2	1
7	abc pharma	computer programmer	bachelors	0	1	0
8	abc pharma	business manager	bachelors	0	0	0
9	abc pharma	business manager	masters	0	0	1
10	facebook	sales executive	bachelors	1	2	0
11	facebook	sales executive	masters	1	2	1
12	facebook	business manager	bachelors	1	0	0
13	facebook	business manager	masters	1	0	1
14	facebook	computer programmer	bachelors	1	1	0
15	facebook	computer programmer	masters	1	1	1

In [14]:
```python
inp2=inp.drop(['company','job','degree'], axis=1)
inp2
```

Out[14]:

	compn	jobn	degreen
0	2	2	0
1	2	2	1
2	2	0	0
3	2	0	1
4	2	1	0
5	2	1	1
6	0	2	1
7	0	1	0
8	0	0	0
9	0	0	1
10	1	2	0
11	1	2	1
12	1	0	0
13	1	0	1
14	1	1	0
15	1	1	1

In [15]:
```python
from sklearn import tree
model=tree.DecisionTreeClassifier()
model.fit(inp2,target)
```

Out[15]: DecisionTreeClassifier()

In [16]:
```python
score=model.score(inp2,target)
score
```

Out[16]: 1.0

testing

In [17]:
```python
model.predict([[2,0,0]])
```

Out[17]: array(['1'], dtype=object)

In [18]:
```python
model.predict([[0,2,1]])
```

Out[18]: array(['0'], dtype=object)

In [ ]: