In [1]:
```
import pandas as pd
from sklearn.ensemble import BaggingClassifier
from sklearn.tree import DecisionTreeClassifier
from sklearn.model_selection import KFold,cross_val_score
```

In [2]:
```
data=pd.read_csv('diabetes.csv')
data.head()
```

Out[2]:

	Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	BMI	DiabetesPedigreeFunction	Age	Outcome
0	6	148	72	35	0	33.6	0.627	50	1
1	1	85	66	29	0	26.6	0.351	31	0
2	8	183	64	0	0	23.3	0.672	32	1
3	1	89	66	23	94	28.1	0.167	21	0
4	0	137	40	35	168	43.1	2.288	33	1

In [3]:
```
data.shape
```

Out[3]:
```
(768, 9)
```

In [4]:
```
array=data.values
```

In [5]:
```
x=array[:,0:8]
y=array[:,8]
```

In [6]:
```
kfold=KFold(n_splits=5,shuffle=True,random_state=12)
```

In [7]:
```
dt=DecisionTreeClassifier()
```

In [8]:
```
model=BaggingClassifier(base_estimator=dt,n_estimators=100,)
```

In [9]:
```
result=cross_val_score(model,x,y,cv=kfold)
```

In [10]:
```
result.mean()
```

Out[10]:
```
0.7656735421441304
```