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In [1]:
```
import numpy as np
import pandas as pd
import seaborn as sns
from sklearn.model_selection import train_test_split
import matplotlib.pyplot as plt
import warnings
warnings.filterwarnings("ignore")
```

SVM

In [2]:
```
read=pd.read_csv("Social_Network_Ads.csv")
```

In [3]:
```
read.head()
```

Out[3]:

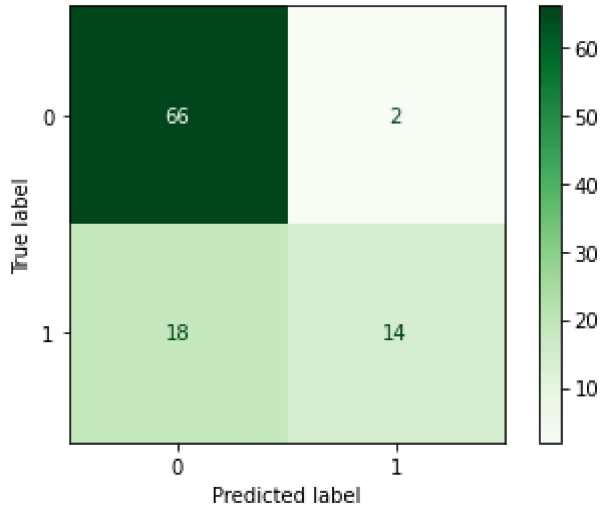
	User ID	Gender	Age	EstimatedSalary	Purchased
0	15624510	Male	19	19000	0
1	15810944	Male	35	20000	0
2	15668575	Female	26	43000	0
3	15603246	Female	27	57000	0
4	15804002	Male	19	76000	0

In [4]:
```
x=read.iloc[:,[2,3]]
y=read.iloc[:,-1]
```

In [5]:
```
from sklearn.model_selection import train_test_split
xtrain,xtest,ytrain,ytest=train_test_split(x,y,test_size=1/4,random_state=0)
```

In [6]:
```
from sklearn.svm import SVC
svc = SVC()
svc.fit(xtrain,ytrain)
ypred = svc.predict(xtest)
```

In [7]:
```
from sklearn.metrics import plot_confusion_matrix,accuracy_score
plot_confusion_matrix(svc,xtest,ytest,cmap="Greens")
plt.show()
```



In [8]:
```
accuracy_score(ytest,ypred)
```

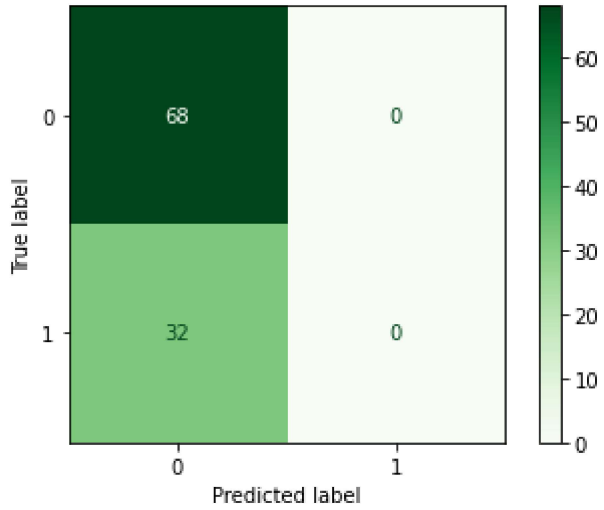
Out[8]: 0.8

Naive Bayes

In [9]:
```
from sklearn.naive_bayes import BernoulliNB
nb = BernoulliNB()
nb.fit(xtrain,ytrain)
ypred = nb.predict(xtest)
```

In [10]:
```
ypredict = nb.predict(xtest)
```

In [11]:
```
from sklearn.metrics import plot_confusion_matrix,accuracy_score
plot_confusion_matrix(nb,xtest,ytest,cmap="Greens",)
plt.show()
```



In [12]:
```
accuracy_score(ytest,ypredict)
```

Out[12]: 0.68