In [6]:
```
import pandas as pd
from sklearn.preprocessing import Binarizer
from sklearn.model_selection import train_test_split
from sklearn.metrics import ConfusionMatrixDisplay
from sklearn.tree import DecisionTreeClassifier
```

In [7]:
```
df = pd.read_csv("Admission_Predict.csv")
```

In [8]:
```
df.columns
```

Out[8]:
```
Index(['Serial No.', 'GRE Score', 'TOEFL Score', 'University Rating', 'SOP',
       'LOR ', 'CGPA', 'Research', 'Chance of Admit '],
      dtype='object')
```

In [9]:
```
bi = Binarizer(threshold = 0.75)
df['Chance of Admit '] = bi.fit_transform(df[['Chance of Admit ']])
```

In [10]:
```
df.head()
```

Out[10]:

	Serial No.	GRE Score	TOEFL Score	University Rating	SOP	LOR	CGPA	Research	Chance of Admit
0	1	337	118	4	4.5	4.5	9.65	1	1.0
1	2	324	107	4	4.0	4.5	8.87	1	1.0
2	3	316	104	3	3.0	3.5	8.00	1	0.0
3	4	322	110	3	3.5	2.5	8.67	1	1.0
4	5	314	103	2	2.0	3.0	8.21	0	0.0

In [11]:
```
x = df.drop(['Chance of Admit '], axis=1)
y = df['Chance of Admit '].astype('int')
```

In [12]:
```
x_test, y_train, y_test = train_test_split(x, y, random_state=0, test_size=0.25)
```

In [13]:
```
c = DecisionTreeClassifier(random_state = 0)
```

In [14]:
```
c.fit(x_train, y_train)
```

Out[14]:
```
DecisionTreeClassifier
DecisionTreeClassifier(random_state=0)
```

In [15]:
```
y_pred = c.predict(x_test)
```

In [16]:
```
result = pd.DataFrame({
    'Actual' : y_test,
    'predicted' : y_pred
})
```

In [17]:
```
result
```

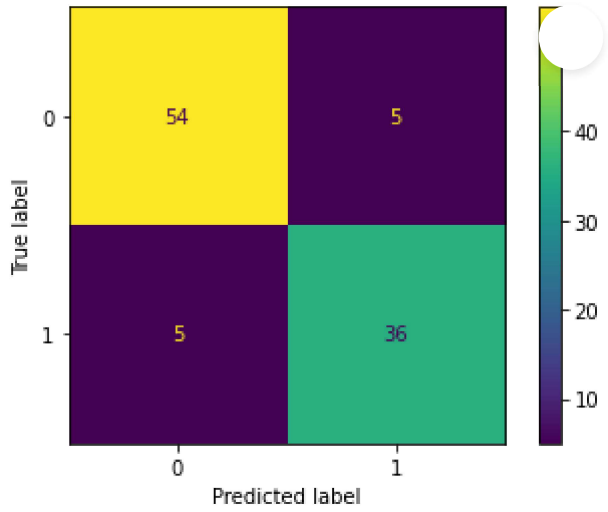
Out[17]:

	Actual	predicted
132	0	0
309	0	0
341	1	1
196	0	0
246	0	1
...	...	...
146	0	0
135	1	1
390	0	0
264	0	0
364	1	1

100 rows × 2 columns

In [18]:
```
ConfusionMatrixDisplay.from_predictions(y_test, y_pred)
```

Out[18]:
```
<sklearn.metrics._plot.confusion_matrix.ConfusionMatrixDisplay at 0x24b2b6a51e0
>
```



In [ ]:

In [ ]: