In [50]:
```
import pandas as pd
from sklearn.datasets import load_digits
digits = load_digits()
```

In [51]:
```
df.head()
```

Out[51]:

	pixel_0_0	pixel_0_1	pixel_0_2	pixel_0_3	pixel_0_4	pixel_0_5	pixel_0_6	pixel_0_7	pixel_1_0	pixel_1_1	...	pixel_6_6
0	0.0	0.0	5.0	13.0	9.0	1.0	0.0	0.0	0.0	0.0	...	0.0
1	0.0	0.0	0.0	12.0	13.0	5.0	0.0	0.0	0.0	0.0	...	0.0
2	0.0	0.0	0.0	4.0	15.0	12.0	0.0	0.0	0.0	0.0	...	5.0
3	0.0	0.0	7.0	15.0	13.0	1.0	0.0	0.0	0.0	8.0	...	9.0
4	0.0	0.0	0.0	1.0	11.0	0.0	0.0	0.0	0.0	0.0	...	0.0

5 rows × 64 columns

In [52]:
```
from sklearn.model_selection import train_test_split
x_train, x_test, y_train, y_test = train_test_split(digits.data,digits.target,train_size=0.8)
```

In [53]:
```
len(x_train)
```

Out[53]: 1437

In [54]:
```
len(x_test)
```

Out[54]: 360

In [55]:
```
from sklearn.svm import SVC
model = SVC()
```

In [56]:
```
model.fit(x_train, y_train)
```

Out[56]:

▼ SVC

```
SVC()
```

In [57]:
```
model.score(x_test, y_test)
```

Out[57]: 0.9861111111111112

In [58]:
```
model_C = SVC(C=1)
model_C.fit(x_train, y_train)
model_C.score(x_test, y_test)
```

Out[58]: 0.9861111111111112

In [59]:
```
model_C = SVC(C=10)
model_C.fit(x_train, y_train)
model_C.score(x_test, y_test)
```

Out[59]: 0.9916666666666667

In [ ]: