```python
import numpy as np
import pandas as pd
from matplotlib import pyplot as plt
from sklearn.ensemble import RandomForestClassifier
from sklearn.model_selection import train_test_split
%matplotlib inline
a=pd.read_csv('classifiaction test2.csv')
a.head()
```
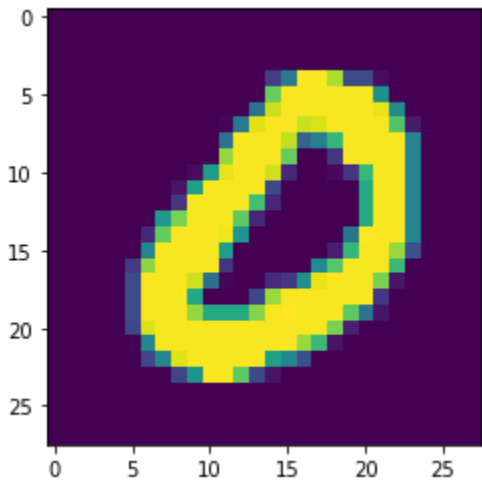
Out[1]:

	label	column_0	column_1	column_2	column_3	column_4	column_5	column_6	column_7	column_8	...	column_774
0	0	0	0	0	0	0	0	0	0	0	...	0
1	2	0	0	0	0	0	0	0	0	0	...	0
2	0	0	0	0	0	0	0	0	0	0	...	0
3	7	0	0	0	0	0	0	0	0	0	...	0
4	7	0	0	0	0	0	0	0	0	0	...	0

5 rows × 785 columns

```python
b=a.iloc[2,1:].values
b=b.reshape(28,28).astype('uint8')
plt.imshow(b)
```

Out[2]: <matplotlib.image.AxesImage at 0x254d82b2f08>


```python
df_x=a.iloc[:,1:]
df_y=a.iloc[:,0]
x_train, x_test, y_train, y_test=train_test_split(df_x,df_y,test_size=0.2,random_state=4)
y_train.head()
```

Out[3]:
```
3    7
1    2
4    7
2    0
Name: label, dtype: int64
```

```python
rf=RandomForestClassifier(n_estimators=100)
rf.fit(x_train,y_train)
```

Out[4]: RandomForestClassifier(bootstrap=True, ccp_alpha=0.0, class_weight=None,
                       criterion='gini', max_depth=None, max_features='auto',
                       max_leaf_nodes=None, max_samples=None,
                       min_impurity_decrease=0.0, min_impurity_split=None,
                       min_samples_leaf=1, min_samples_split=2,
                       min_weight_fraction_leaf=0.0, n_estimators=100,
                       n_jobs=None, oob_score=False, random_state=None,
                       verbose=0, warm_start=False)

```python
pred = rf.predict(x_test)
pred
```

Out[5]: array([0], dtype=int64)

```python
s=y_test.values
count=0
for i in range(len(pred)):
    if pred[i]==s[i]:
        count=count+1
count

len(pred)
```

Out[7]: 1

```python

```