```
import numpy
from sklearn import linear_model

X = numpy.array([3.78, 2.44, 2.09, 0.14, 1.72, 1.65, 4.92, 4.37, 4.96,
4.52, 3.69, 5.88]).reshape(-1,1)

y = numpy.array([0, 0, 0, 0, 0, 0, 1, 1, 1, 1, 1, 1])

logr = linear_model.LogisticRegression()
logr.fit(X,y)

#predict if tumor is cancerous where the size is 3.46mm:
predicted = logr.predict(numpy.array([3.46]).reshape(-1,1))
print(predicted)
```

```
[0]
```

```
import numpy
from sklearn import linear_model

X = numpy.array([3.78, 2.44, 2.09, 0.14, 1.72, 1,65, 4.92, 4.37, 4.96,
4.52, 3.69,]).reshape(-1, 1)

y = numpy.array([0,0,0,0,0,0,1,1,1,1,1,1,])

logr = linear_model.LogisticRegression()
logr.fit(X,y)
```

```
LogisticRegression()
```

```
predicted = logr.predict(numpy.array([3.46]).reshape(-1,1))

print(predicted)
```

```
[1]
```