CODING:

```
import math

X = [[1],[2],[3],[6],[7],[8]]
y = [0,0,0,1,1,1]

def mean(v): return sum(v)/len(v)
def var(v): return sum((x-mean(v))**2 for x in v)/len(v)
def gauss(x,m,v): return math.exp(-(x-m)**2/(2*v))

def predict(x):
    p = {}
    for c in set(y):
        d = [X[i][0] for i in range(len(y)) if y[i]==c]
        p[c] = gauss(x, mean(d), var(d))
    return max(p, key=p.get)

correct = sum(predict(X[i][0])==y[i] for i in range(len(y)))
print("Accuracy:", correct/len(y))
```

OUTPUT:

```python
import math

X = [[1],[2],[3],[6],[7],[8]]
y = [0,0,0,1,1,1]

def mean(v): return sum(v)/len(v)
def var(v): return sum((x-mean(v))**2 for x in v)/len(v)
def gauss(x,m,v): return math.exp(-(x-m)**2/(2*v))

def predict(x):
    p = {}
    for c in set(y):
        d = [X[i][0] for i in range(len(y)) if y[i]==c]
        p[c] = gauss(x, mean(d), var(d))
    return max(p, key=p.get)

correct = sum(predict(X[i][0])==y[i] for i in range(len(y)))
print("Accuracy:", correct/len(y))
```

Output

```
Accuracy: 1.0

=== Code Execution Successful ===
```