```
import math

X = [[1],[2],[3],[4],[5],[6]]
y = [0,0,0,1,1,1]
w = 0
b = 0
lr = 0.1
epochs = 1000

def sigmoid(z):
    return 1 / (1 + math.exp(-z))

for _ in range(epochs):
    for i in range(len(X)):
        z = w*X[i][0] + b
        pred = sigmoid(z)
        error = y[i] - pred
        w += lr * error * X[i][0]
        b += lr * error

y_pred = [round(sigmoid(w*x[0]+b)) for x in X]

print("Predicted:", y_pred)
accuracy = sum([y[i]==y_pred[i] for i in range(len(y))])/len(y)
print("Accuracy:", accuracy)
```

OUTPUT:

```
>>>
========== RESTART: C:/Users/prast/OneDrive/Desktop/ML LAB/EXP 7.py ==========
Predicted: [0, 0, 0, 1, 1, 1]
Accuracy: 1.0
>>>
```