```
11: p_1 = 1 / (1 + T.exp(-T.dot(x, w)-b))
12: xent = -y*T.log(p_1) - (1-y)*T.log(1-p_1)
13: cost = xent.mean() + 0.01*(w**2).sum()
14: gw,gb = T.grad(cost, [w,b])
15: prediction = p_1 > 0.5
```