1. WAP in python to implement Naive Bayes algorithm for following training data.

```
weather=
['Sunny','Sunny','Overcast','Rainy','Rainy','Rainy','Rainy','Overcast','Sunny','Sunny','Sunny','Ov
ercast','Rainy']
temp= ['Hot','Hot','Mild','Cool','Cool','Mild','Cool','Mild','Mild','Mild','Mild','Mild','Mild']
humidity=
['High','High','High','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Normal','Norm
```

Now, predict whether to play or not in when weather is x=(Overcast,Cool,High,Srong).

- 2. Training AND gate using Hebbian Algorithm. Preferably, use Python.
- 3. Training OR gate using Perceptron Learning Algorithm Note: you may refer to this link for understanding:

 $\underline{https://www.geeks for geeks.org/implementation-of-perceptron-algorithm-for-or-logic-gate-with-2-bit-binary-input/}\\$