

## Practical no -9

### Code :-

```
print("weather and play dependency using navie Bayes\n")
```

```
Weather = {"overcast":{"yes":4,"no":0},"sunny":{"yes":3,"no":2},"rainy":{"yes":2,"no":3}}
Total = {"yes":9,"no":5,"overcast":4,"sunny":5,"rainy":5,"total":14}
```

```
def P(x,y):
    result = (prob(x) * prob2(y,x))/prob(y)
    return result
def prob(s):
    for element in Total:
        if s == element :
            value = Total[element]/Total["total"]
    return value
```

```
def prob2(u,v):
    for element in Weather:
        if u == element :
            w = Weather[u]
            for element2 in w :
                if v == element2:
                    val = w[v]
    val2 = Total[v]
    val3 = val/val2
    return val3
```

```
x = input("x for p(x|y)? : ")
y = input("y for p(x|y)? : ")
res = P(x,y)
```

```
print("P(",x,"|",y,") = ",res)
```

