

In [7]:

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outlook = [0,0,1,0,1,1,0] # sunny = 0 and cloudy = 1
temperature = [0,1,1,1,0,0,0] # cold = 0 and warm = 1
routine = [0,1,0,0,0,1,1] # indoor = 0 and outdoor = 1
coat = [0,0,0,0,1,1,1] # no = 0 and yes = 1

sunny=0
cloudy=0
indoor=0
warm=0
outdoor=0
cold=0
yes=0

t=len(outlook)
for i in range(0,7):
    if coat[i]==1:
        yes=yes+1
        if outlook[i]==1:
            cloudy=cloudy+1
        if temperature[i]==1:
            warm=warm+1
        if routine[i]==1:
            outdoor=outdoor+1

if warm==0 or cloudy ==0 or outdoor ==0:
    upper=0
else:
    upper=(cloudy/yes)*(warm/yes)*(outdoor/yes)*(yes/t)

if warm==0 or cloudy ==0 or outdoor ==0:
    lower=0
else:
    lower=(cloudy/t)*(warm/t)*(outdoor/t)

if upper==0 or lower==0:
    total=0
else:
    total=(upper/lower)
print(total)

sunny=0
cloudy=0
indoor=0
warm=0
outdoor=0
cold=0
yes=0
c1=0
w1=0
o1=0

t=len(outlook)
for i in range(0,t):
    if coat[i]==0:
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        yes=yes+1
        if outlook[i]==1:
            cloudy=cloudy+1
        if temperature[i]==1:
            warm=warm+1
        if routine[i]==1:
            outdoor=outdoor+1

print(cloudy)
print(warm)
print(outdoor)
print(yes)

for i in range(0,t):
    if outlook[i]==1:
        c1=c1+1
    if temperature[i]==1:
        w1=w1+1
    if a3[i]==1:
        o1=o1+1

print(o1)
print(w1)
print(c1)

if warm==0 or cloudy ==0 or outdoor ==0:
    upper=0
else:
    upper=(cloudy/yes)*(warm/yes)*(outdoor/yes)*(yes/t)

if w1==0 or cloudy ==0 or outdoor ==0:
    lower=0
else:
    lower=(c1/t)*(w1/t)*(o1/t)

if upper==0 or lower==0:
    total=0
else:
    total=(upper/lower)

print(total)

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0
1
3
1
4
3
3
3
0.3402777777777778

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