Q1

b.

Timeline

Description automatically generated

c. supp = 0.05, conf=0.8

Table

Description automatically generated

e.

logit = -0.0799+(0.0157)Age+(-0.3824)Delivery\_No+(-0.5706)Delivery\_Time+(0.7409)BP+(-1.1209)Heart

BP has the highest odds = 2.1

f. h(x)= 0.000188 x\_1-0.320x\_2-0.320x\_3+0.840x\_4-1.36x\_5-0.044

Q2.

Graphical user interface, text, application

Description automatically generated

Q3.

1st split:

Gain(Outlook)=0.94-0.6936=0.2464, Gain(Humidity)=0.94-0.6935=0.1515

Gain(Temperature)=0.94-0.9111=0.0289, Gain(Windy)=0.94-0.8922=0.0478

2nd split:

gain(humidity) = 0.971 for sunny; Gain(windy) = 0.971 for rainy

Q4.

1. SV = (0.8460, 0.3852) -> h(x)=0.846x\_1 + 0.3852x\_2-3.501
2. h(3,4) = 0.5778 -> y=1