

Question 3

Given T_2 (Age = 30, CreditScore = 645,

Base on CreditScore $\leq 650 \rightarrow [2, 4, 6, 8]$

$\rightarrow P_1 = 1$ is probability of High Risk level

Base on Age $\leq 35 \rightarrow [1, 2, 4, 6, 8]$

$P_2 = 0.75$ is probability of High Risk level

Because P_1 and P_2 is independent

$$P(\text{High} | T_2) = 1 - (1 - P_1) \times (1 - P_2)$$

$$= 1 - (1 - 1) \times (1 - 0.75)$$

$$= 1$$

Then T_2 has a 100% probability of being High Risk :