|  | class $=$ on <br> time | class = late | class = very <br> late | class = can- <br> celled |
| :--- | :--- | :--- | :--- | :--- |
| day $=$ <br> weekday | $\mathbf{9 / 1 4}=\mathbf{0 . 6 4}$ | $\mathbf{1 / 2}=\mathbf{0 . 5}$ | $\mathbf{3 / 3}=\mathbf{1}$ | $\mathbf{0} / \mathbf{1}=\mathbf{0}$ |
| day $=$ <br> saturday | $2 / 14=0.14$ | $1 / 2=0.5$ | $0 / 3=0$ | $1 / 1=1$ |
| day = sunday | $1 / 14=0.07$ | $0 / 2=0$ | $0 / 3=0$ | $0 / 1=0$ |
| day $=$ holiday | $2 / 14=0.14$ | $0 / 2=0$ | $0 / 3=0$ | $0 / 1=0$ |
| season $=$ <br> spring | $4 / 14=0.29$ | $0 / 2=0$ | $0 / 3=0$ | $1 / 1=1$ |
| season $=$ <br> summer | $6 / 14=0.43$ | $0 / 2=0$ | $0 / 3=0$ | $0 / 1=0$ |
| season $=$ <br> autumn | $2 / 14=0.14$ | $0 / 2=0$ | $1 / 3=0.33$ | $0 / 1=0$ |
| season $=$ <br> winter | $\mathbf{2 / 1 4}=\mathbf{0 . 1 4}$ | $\mathbf{2 / 2}=\mathbf{1}$ | $\mathbf{2 / 3}=\mathbf{0 . 6 7}$ | $\mathbf{0 / 1}=\mathbf{0}$ |
| wind $=$ none | $5 / 14=0.36$ | $0 / 2=0$ | $0 / 3=0$ | $0 / 1=0$ |
| wind $=$ high | $\mathbf{4 / 1 4}=\mathbf{0 . 2 9}$ | $\mathbf{1 / 2}=\mathbf{0 . 5}$ | $\mathbf{1 / 3}=\mathbf{0 . 3 3}$ | $\mathbf{1 / \mathbf { 1 } = \mathbf { 1 }}$ |
| wind $=$ <br> normal | $5 / 14=0.36$ | $1 / 2=0.5$ | $2 / 3=0.67$ | $0 / 1=0$ |
| rain $=$ none | $5 / 14=0.36$ | $1 / 2=0.5$ | $1 / 3=0.33$ | $0 / 1=0$ |
| rain = slight | $8 / 14=0.57$ | $0 / 2=0$ | $0 / 3=0$ | $0 / 1=0$ |
| rain $=$ <br> heavy | $\mathbf{1 / 1 4}=\mathbf{0 . 0 7}$ | $\mathbf{1 / 2}=\mathbf{0 . 5}$ | $\mathbf{2 / 3}=\mathbf{0 . 6 7}$ | $\mathbf{1 / \mathbf { 1 } = \mathbf { 1 }}$ |
| Prior <br> Probability | $\mathbf{1 4 / 2 0}=$ <br> $\mathbf{0 . 7 0}$ | $\mathbf{2 / 2 0}=$ | $\mathbf{3 / 2 0}=$ | $\mathbf{1 / 2 0}=\mathbf{0 . 0 5}$ |
| $\mathbf{0 . 1 0}$ | $\mathbf{0 . 1 5}$ |  |  |  |

Figure 2.2 Conditional and Prior Probabilities: train Dataset

