

EXPERIMENT – 2

OUTPUT:

The screenshot shows the Microsoft Visual Studio Code interface. The left sidebar displays icons for file operations like Open, Save, Find, and Refresh. The main editor area has tabs for '02.py' and 'data.csv'. The code in '02.py' is as follows:

```
1 import csv
2 with open(input("Enter CSV filename: "), 'r') as file:
3     data = list(csv.reader(file))
4     num_attributes = len(data[0]) - 1
5     S = ['0'] * num_attributes
6     G = [['?'] * num_attributes]
7     for example in data:
8         if example[-1] == 'Yes':
9             G = [g for g in G if all(g[i] == '?' or g[i] == example[i] for i in range(num_attributes))]
10            for i in range(num_attributes):
11                if S[i] != example[i]:
12                    S[i] = '?'
13        else:
14            newG = []
15            for g in G:
16                if not all(g[i] == '?' or g[i] == example[i] for i in range(num_attributes)):
17                    newG.append(g)
18                else:
19                    for i in range(num_attributes):
20                        if g[i] == '?':
21                            hyp = g.copy()
22                            hyp[i] = S[i] if S[i] != '?' else '0'
23                            if hyp not in newG:
24                                newG.append(hyp)
25            G = newG
26 print("Specific hypothesis:", S)
27 print("General hypotheses:", G)
```

The terminal tab at the bottom shows the execution of the script:

```
PS D:\College\Machine Learning\Experiments\Code Files> & 'c:\Users\HARSHINI RN\AppData\Local\Temp\Python Scripts\02.py'
...
Enter CSV filename: data.csv
Specific hypothesis: ['?', '?', '?', '?']
General hypotheses: []
PS D:\College\Machine Learning\Experiments\Code Files> []
```

The status bar at the bottom indicates the current line (Ln 27), column (Col 32), and other settings.