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ML Lab Test 1

Program 9

Consider the following data set which is having the data about which particular seeds are poisonous. Use FIND-S algorithm find the hypothesis. Implement the algorithm for the same

Find S Algorithm

In [12]:
```
hypothesis = ['NULL'] * len(data[0])
print('Initial hypothesis:', hypothesis)
for j in range(0, len(values)):
    if values[j] == 'Yes':
        for i in range(0, len(data[0])):
            if hypothesis[i] == 'NULL' or hypothesis[i] == data[j][i]:
                hypothesis[i] = data[j][i]
            else:
                hypothesis[i] = '?'
    print('After', j, 'iteration in dataset, the hypothesis is:', hypothesis)
print('Final hypothesis:', hypothesis)
```

```
Initial hypothesis: ['NULL', 'NULL', 'NULL', 'NULL']
After 0 iteration in dataset, the hypothesis is: ['Green', 'Hard', 'No', 'Wrinkled']
After 1 iteration in dataset, the hypothesis is: ['Green', 'Hard', 'No', 'Wrinkled']
After 2 iteration in dataset, the hypothesis is: ['Green', 'Hard', 'No', 'Wrinkled']
After 3 iteration in dataset, the hypothesis is: ['?', 'Hard', 'No', 'Wrinkled']
After 4 iteration in dataset, the hypothesis is: ['?', '?', '?', '?']
After 5 iteration in dataset, the hypothesis is: ['?', '?', '?', '?']
After 6 iteration in dataset, the hypothesis is: ['?', '?', '?', '?']
Final hypothesis: ['?', '?', '?', '?']
```

In [ ]: