LAB PROGRAM – CANDIDATE ELIMINATION ALGORITHM

```python
import pandas as pd

import numpy as np


data = pd.read_csv('Training_examples.csv')


concept = np.array(data)[:,:-1]

print("The concepts to be learned")

print(concept)

target = np.array(data)[:,-1]

print("\nLabels specific to the concepts\n")

print(target)

print("\n")


def learn(concept,target):

        specific_h = concept[0].copy()

        general_h = [['?' for i in range(len(specific_h))] for i in range(len(specific_h))]


        for i,h in enumerate(concept):

                if target[i]=='Yes':

                        for j in range(len(specific_h)):

                                if h[j]!=specific_h[j]:

                                        specific_h[j]='?'

                                        general_h[j][j]='?'


                elif target[i]=='No':

                        for j in range(len(specific_h)):

                                if h[j]!=specific_h[j]:
```

```python
                    general_h[j][j]=specific_h[j]
            else:
                    general_h[j][j]='?'


    indices = [i for i,val in enumerate(general_h) if val==['?' for i in range(len(specific_h))]]
    for i in indices:
            general_h.remove(['?' for i in range(len(specific_h))])


    return specific_h,general_h


s_final, g_final = learn(concept,target)
print("Final S: ", s_final)
print("Final G: ", g_final)
```