

```

l=[["round","triangle","round","purple","yes","yes"],["square","square","square","green","yes","no"],["square","triangle","round","yellow","yes","yes"],["round","triangle","round","green","no","no"],["square","square","round","yellow","yes","yes"]]
for i in l:
    print(i)
print()
print()
print("----- SPECIFIC -----")
print()
h=["Null",]*5
print(h)
x=1
for i in l:
    x+=1
    if(i[-1]=="yes"):
        h=i[:-1]
        print(h)
        break
    print(h)
for i in l[x:]:
    if(i[-1]=="no"):
        print(h)
        continue
    for j in range(len(i[:-1])):
        if(i[j]!=h[j]):
            h[j]="?"
    print(h)
print()
print()
print("----- GENERAL -----")
print()
g=["?",]*5
x=0
for i in l:

    if(i[-1]=="yes" and x==0):
        x+=1
        h=i[:-1]

    elif(i[-1]=="yes"):
        for j in range(len(i[:-1])):
            if(i[j]!=h[j]):
                h[j]="?"
    else:
        L=[]
        for j in range(len(h)):
            if(h[j]=="?"):
                continue
            elif(h[j]!=i[j]):
                L.append(["?",]*j + [h[j],]+ ["?",]*(5-j-1))

```

```
        else:
            h[j]="?"
        g=L[:,:]
    if(g==[]):
        print(["?",]*5)
        continue
    print(g)
```

Python 3.10.11 (tags/v3.10.11:7d4cc5a, Apr 5 2023, 00:38:17) [MSC v.1929 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: C:\Users\Raghul\Desktop\ML\candidate (1).py =====

```
['round', 'triangle', 'round', 'purple', 'yes', 'yes']
['square', 'square', 'square', 'green', 'yes', 'no']
['square', 'triangle', 'round', 'yellow', 'yes', 'yes']
['round', 'triangle', 'round', 'green', 'no', 'no']
['square', 'square', 'round', 'yellow', 'yes', 'yes']
```

----- SPECIFIC -----

```
['Null', 'Null', 'Null', 'Null', 'Null']
['round', 'triangle', 'round', 'purple', 'yes']
['?', 'triangle', 'round', '?', 'yes']
['?', 'triangle', 'round', '?', 'yes']
['?', '?', 'round', '?', 'yes']
```

----- GENERAL -----

```
['?', '?', '?', '?', '?']
[['round', '?', '?', '?', '?'], ['?', 'triangle', '?', '?', '?'], ['?', '?',
'round', '?', '?'], ['?', '?', '?', 'purple', '?']]
[['round', '?', '?', '?', '?'], ['?', 'triangle', '?', '?', '?'], ['?', '?',
'round', '?', '?'], ['?', '?', '?', 'purple', '?']]
['?', '?', '?', '?', '?']
['?', '?', '?', '?', '?']
```

Python 3.10.11 (tags/v3.10.11:7d4cc5a, Apr 5 2023, 00:38:17) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: C:\Users\Raghul\Desktop\ML\candidate (2).py =====

```
['round', 'triangle', 'round', 'purple', 'yes', 'yes']  
['square', 'square', 'square', 'green', 'yes', 'no']  
['square', 'triangle', 'round', 'yellow', 'yes', 'yes']  
['round', 'triangle', 'round', 'green', 'no', 'no']  
['square', 'square', 'round', 'yellow', 'yes', 'yes']
```

----- SPECIFIC -----

```
['Null', 'Null', 'Null', 'Null', 'Null']  
['round', 'triangle', 'round', 'purple', 'yes']  
['?', 'triangle', 'round', '?', 'yes']  
['?', 'triangle', 'round', '?', 'yes']  
['?', '?', 'round', '?', 'yes']
```

----- GENERAL -----

```
['?', '?', '?', '?', '?']  
[['round', '?', '?', '?', '?'], ['?', 'triangle', '?', '?', '?'], ['?', '?', 'round', '?', '?'], ['?', '?', '?', 'purple', '?']]  
[['round', '?', '?', '?', '?'], ['?', 'triangle', '?', '?', '?'], ['?', '?', 'round', '?', '?'], ['?', '?', '?', 'purple', '?']]  
['?', '?', '?', '?', '?']  
['?', '?', '?', '?', '?']
```

>>>