

```
In [2]: import numpy as np
import pandas as pd
df=pd.read_csv(r"C:\Users\evang\Downloads\DATASETS\train_u6lujuX_CVtuZ9i.xls")
df
```

Out[2]:

	Loan_ID	Gender	Married	Dependents	Education	Self_Employed	ApplicantIncome	Coap
0	LP001002	Male	No	0	Graduate	No	5849	
1	LP001003	Male	Yes	1	Graduate	No	4583	
2	LP001005	Male	Yes	0	Graduate	Yes	3000	
3	LP001006	Male	Yes	0	Not Graduate	No	2583	
4	LP001008	Male	No	0	Graduate	No	6000	
...	
609	LP002978	Female	No	0	Graduate	No	2900	
610	LP002979	Male	Yes	3+	Graduate	No	4106	
611	LP002983	Male	Yes	1	Graduate	No	8072	
612	LP002984	Male	Yes	2	Graduate	No	7583	
613	LP002990	Female	No	0	Graduate	Yes	4583	

614 rows × 13 columns



```
In [3]: a=np.array(df)[:,-1]
print(a)
```

```
[['LP001002' 'Male' 'No' ... 360.0 1.0 'Urban']
 ['LP001003' 'Male' 'Yes' ... 360.0 1.0 'Rural']
 ['LP001005' 'Male' 'Yes' ... 360.0 1.0 'Urban']
 ...
 ['LP002983' 'Male' 'Yes' ... 360.0 1.0 'Urban']
 ['LP002984' 'Male' 'Yes' ... 360.0 1.0 'Urban']
 ['LP002990' 'Female' 'No' ... 360.0 0.0 'Semiurban']]
```

```
In [5]: target=np.array(df)[:,-1]
print(target)
```

```
[ 'Y' 'N' 'Y' 'Y' 'Y' 'Y' 'Y' 'N' 'Y' 'N' 'Y' 'Y' 'Y' 'N' 'Y' 'Y' 'Y' 'N'
 'N' 'Y' 'N' 'Y' 'N' 'N' 'N' 'Y' 'Y' 'Y' 'N' 'Y' 'N' 'N' 'N' 'Y' 'N' 'Y'
 'N' 'Y' 'Y' 'Y' 'N' 'Y' 'Y' 'Y' 'Y' 'Y' 'Y' 'Y' 'N' 'Y' 'Y' 'Y' 'N' 'N'
 'N' 'Y' 'Y' 'N' 'Y' 'Y' 'Y' 'Y' 'N' 'N' 'N' 'N' 'N' 'Y' 'Y' 'N' 'Y' 'Y'
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 'N' 'Y' 'Y' 'Y' 'N' 'Y' 'Y' 'Y' 'Y' 'Y' 'N' 'Y' 'Y' 'Y' 'Y' 'Y' 'Y' 'Y'
 'Y' 'Y' 'N' 'N' 'Y' 'Y' 'Y' 'Y' 'Y' 'Y' 'N' 'N' 'Y' 'N' 'N' 'Y' 'Y' 'Y'
 'Y' 'Y' 'Y' 'Y' 'N' 'Y' 'N' 'Y' 'Y' 'Y' 'N' 'Y' 'N' 'Y' 'Y' 'N' 'Y' 'N'
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 'N' 'Y' 'Y' 'Y' 'Y' 'Y' 'N' 'Y' 'N' 'N' 'Y' 'Y' 'Y' 'N' 'Y' 'N' 'Y' 'Y'
 'Y' 'Y' 'N' 'N' 'Y' 'Y' 'Y' 'Y' 'Y' 'Y' 'N' 'Y' 'Y' 'Y' 'Y' 'Y' 'Y' 'Y'
 'Y' 'N']
```

```
In [6]: def train(c,t):
        for i,val in enumerate(t):
            if val=="Y":
                specific_hypothesis=c[i].copy()
                break
        for j,val in enumerate(c):
            if t[j]=="Y":
                for x in range(len(specific_hypothesis)):
                    if val[x]!=specific_hypothesis[x]:
                        specific_hypothesis[x]="?"
                    else:
                        pass
        return specific_hypothesis
print("specific_hypothesis:",train(a,target))
```

specific_hypothesis: ['?' '?' '?' '?' '?' '?' '?' '?' '?' '?' '?' '?' '']

In []: