Knowledge Discovery & Data Mining Lab-03

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```
In [1]: import pandas as pd
```

car.data

Attribute Information:
Class Values:
unacc, acc, good, vgood
Attributes:
buying: vhigh, high, med, low.
maint: vhigh, high, med, low.
doors: 2, 3, 4, 5more.
persons: 2, 4, more.
lug_boot: small, med, big.

safety: low, med, high.

```
In [2]: with open('car.data') as f:
    data = f.read()
    data = data.split('\n')
print(data)
```

['vhigh,vhigh,2,2,small,low,unacc', 'vhigh,vhigh,2,2,small,med,unacc', 'vhigh,vhigh,2,2,small,hig h,unacc', 'vhigh,vhigh,2,2,med,low,unacc', 'vhigh,vhigh,2,2,med,med,unacc', 'vhigh,vhigh,2,2,med, high,unacc', 'vhigh,vhigh,2,2,big,low,unacc', 'vhigh,vhigh,2,2,big,med,unacc', 'vhigh,vhigh,2,2,b ig,high,unacc', 'vhigh,vhigh,2,4,small,low,unacc', 'vhigh,vhigh,2,4,small,med,unacc', 'vhigh,vhig h,2,4,small,high,unacc', 'vhigh,vhigh,2,4,med,low,unacc', 'vhigh,vhigh,2,4,med,med,unacc', 'vhig h,vhigh,2,4,med,high,unacc', 'vhigh,vhigh,2,4,big,low,unacc', 'vhigh,vhigh,2,4,big,med,unacc', 'v high,vhigh,2,4,big,high,unacc', 'vhigh,vhigh,2,more,small,low,unacc', 'vhigh,vhigh,2,more,small,m ed,unacc', 'vhigh,vhigh,2,more,small,high,unacc', 'vhigh,vhigh,2,more,med,low,unacc', 'vhigh,vhigh,2,more,med,unacc', 'vhigh,vhigh,2,more,med,high,unacc', 'vhigh,vhigh,2,more,big,low,unacc', 'vhigh,vhigh,2,more,big,med,unacc', 'vhigh,vhigh,2,more,big,high,unacc', 'vhigh,vhigh,3,2,small,1 ow,unacc', 'vhigh,vhigh,3,2,small,med,unacc', 'vhigh,vhigh,3,2,small,high,unacc', 'vhigh,vhigh,3, 2,med,low,unacc', 'vhigh,vhigh,3,2,med,med,unacc', 'vhigh,vhigh,3,2,med,high,unacc', 'vhigh,vhigh h,3,2,big,low,unacc', 'vhigh,vhigh,3,2,big,med,unacc', 'vhigh,vhigh,3,2,big,high,unacc', 'vhigh,v high,3,4,small,low,unacc', 'vhigh,vhigh,3,4,small,med,unacc', 'vhigh,vhigh,3,4,small,high,unacc', 'vhigh,vhigh,3,4,med,low,unacc', 'vhigh,vhigh,3,4,med,med,unacc', 'vhigh,vhigh,3,4,med,high,unac c', 'vhigh,vhigh,3,4,big,low,unacc', 'vhigh,vhigh,3,4,big,med,unacc', 'vhigh,vhigh,3,4,big,high,u nacc', 'vhigh,vhigh,3,more,small,low,unacc', 'vhigh,vhigh,3,more,small,med,unacc', 'vhigh,vhigh, 3,more,small,high,unacc', 'vhigh,vhigh,3,more,med,low,unacc', 'vhigh,vhigh,3,more,med,med,unacc', 'vhigh,vhigh,3,more,med,high,unacc', 'vhigh,vhigh,3,more,big,low,unacc', 'vhigh,vhigh,3,more,big,

```
In [3]: new_data = []
for line in data:
    new_data.append(line.split(','))
```

In [4]: print(new_data) 'low', 'unacc'], ['vhigh', 'med', '5more', 'more', 'small', 'med', 'unacc'], ['vhigh', 'med', '5m ore', 'more', 'small', 'high', 'acc'], ['vhigh', 'med', '5more', 'more', 'more', 'more', 'med', 'low', 'unacc'], ['vhigh', 'med', '5more', 'more', 'med', 'high', 'acc'], ['vhigh', 'med', '5more', 'more', 'med', 'high', 'acc'], ['vhigh', 'med', '5more', 'more', 'big', 'high', 'acc'], ['vhigh', 'med', '5more', 'more', 'big', 'high', 'acc'], ['vhigh', 'med', '5more', 'more', 'big', 'high', 'acc'], ['vhigh', 'low', '2', '2', 'small', 'med', 'unacc'], ['vhigh', 'low', '2', '2', 'small', 'med', 'unacc'], ['vhigh', 'low', '2', '2', 'med', 'low', '2', '2', 'med', 'low', '2', '2', 'med', 'low', '2', '2', 'med', 'low', '2', '2', 'big', 'high', 'low', '2', '2', 'big', 'high', 'unacc'], ['vhigh', 'low', '2', '4', 'small', 'med', 'low', 'unacc'], ['vhigh', 'low', '2', '4', 'small', 'med', 'low', 'unacc'], ['vhigh', 'low', '2', '4', 'small', 'med', 'low', 'unacc'], ['vhigh', 'low', '2', '4', 'med', 'low', 'unacc'], ['vhigh', 'low', '2', '4', 'med', 'high', 'acc'], ['vhigh', 'low', '2', '4', 'med', 'more', 'small', 'high', 'acc'], ['vhigh', 'low', '2', 'more', 'small', 'low', '2', 'more', 'med', 'low', '2', 'more', 'small', 'low', '2', 'more', 'med', 'low', '2', 'more', 'more',

	buvina	maint	doors	persons	lug boot	safety	Label	
				•				
0	vhigh	vhigh	2	2	small	low	unacc	
1	vhigh	vhigh	2	2	small	med	unacc	
2	vhigh	vhigh	2	2	small	high	unacc	
3	vhigh	vhigh	2	2	med	low	unacc	
4	vhigh	vhigh	2	2	med	med	unacc	
1724	low	low	5more	more	med	high	vgood	
1725	low	low	5more	more	big	low	unacc	
1726	low	low	5more	more	big	med	good	
1727	low	low	5more	more	big	high	vgood	
1728		None	None	None	None	None	None	
1720 r	1790 rows x 7 columns							

In [7]: df.to_csv('car.csv', index=False) # converting into a csv file

In [8]: | df.to_excel('car_excel.xlsx', index=False) # converting to excel file

car_excel.xlsx

Microsoft Excel W...

DATA File

car.csv

Microsoft Excel Co...

Haberman's Cancer Survival Dataset

Attribute Information:

- 1. Age of patient at time of operation (numerical)
- 2. Patient's year of operation (year 1900, numerical)
- 3. Number of positive axillary nodes detected (numerical)
- 4. Survival status (class attribute)
 - 1 = the patient survived 5 years or longer
 - 2 = the patient died within 5 year

```
In [9]: with open('haberman.data') as i:
    data1 = i.read()
    data1 = data1.split('\n')
```

```
In [10]: print(data1)
```

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               1
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                                                           3
                                                                          1
               2
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                                                                          1
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               3
                    31
                                     59
                                                                          1
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                    31
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                                                                          2
             305
                    83
                                     58
             306
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                                  None
                                                                      None
            307 rows × 4 columns
In [15]: df1.to_csv('haberman_csv.csv', index=False) # converting into csv file
In [16]: df1.to_excel('haberman_excel.xlsx', index=False) # converting into excel file
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Microsoft Excel W...

Microsoft Excel Co...

DATA File

haberman_excel.xlsx

haberman_csv.csv

haberman.data