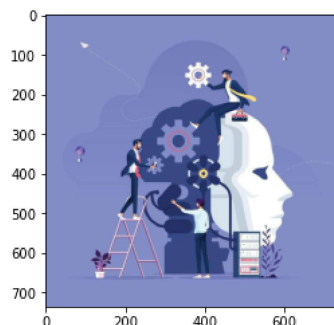


image

```
In [135]: ▶ import matplotlib.pyplot as plt
import matplotlib.image as img
x=img.imread('cea.jpg')
plt.imshow(x)
```

Out[135]: <matplotlib.image.AxesImage at 0x1a0962b2d00>



Read XLSX File

```
In [43]: ▶ import pandas as pd
fr=pd.read_excel(r'Documents\prod_det1.xlsx')
```

```
In [44]: ▶ fr.head
```

Out[44]: <bound method NDFrame.head of

	sno	product_name	price	date
0	1	nabati	10 per 1	2022-11-01
1	2	milkybar	15 per1	2022-12-12
2	3	kitkat	10 per 1	2022-10-22
3	4	dairy milk	20 per 1	2022-06-20
4	5	5 star	25 per 1	2022-08-03
5	6	bountry	30 per 1	2022-05-12

```
In [58]: ▶ fr.head()
```

Out[58]:

	sno	product_name	price	date
0	1	nabati	10 per 1	2022-11-01
1	2	milkybar	15 per1	2022-12-12
2	3	kitkat	10 per 1	2022-10-22
3	4	dairy milk	20 per 1	2022-06-20
4	5	5 star	25 per 1	2022-08-03

```
In [45]: ▶ fr.head(3)
```

Out[45]:

	sno	product_name	price	date
0	1	nabati	10 per 1	2022-11-01
1	2	milkybar	15 per1	2022-12-12
2	3	kitkat	10 per 1	2022-10-22

```
In [46]: ▶ fr.tail()
```

Out[46]:

	sno	product_name	price	date
1	2	milkybar	15 per1	2022-12-12
2	3	kitkat	10 per 1	2022-10-22
3	4	dairy milk	20 per 1	2022-06-20
4	5	5 star	25 per 1	2022-08-03
5	6	bountry	30 per 1	2022-05-12

```
In [47]: fr.tail(3)
```

Out[47]:

	sno	product_name	price	date
3	4	dairy milk	20 per 1	2022-06-20
4	5	5 star	25 per 1	2022-08-03
5	6	bountry	30 per 1	2022-05-12

```
In [48]: fr.head(-2)
```

Out[48]:

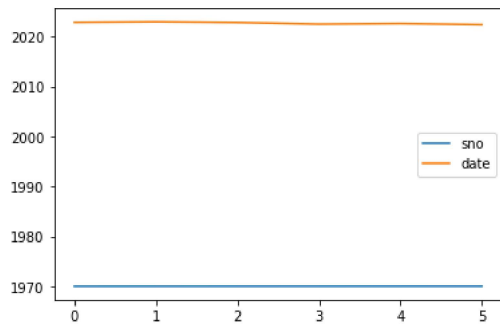
	sno	product_name	price	date
0	1	nabati	10 per 1	2022-11-01
1	2	milkybar	15 per1	2022-12-12
2	3	kitkat	10 per 1	2022-10-22
3	4	dairy milk	20 per 1	2022-06-20

```
In [49]: print("shape:",fr.shape)
print("dimension:",fr.ndim)
print("size:",fr.size)
```

shape: (6, 4)
dimension: 2
size: 24

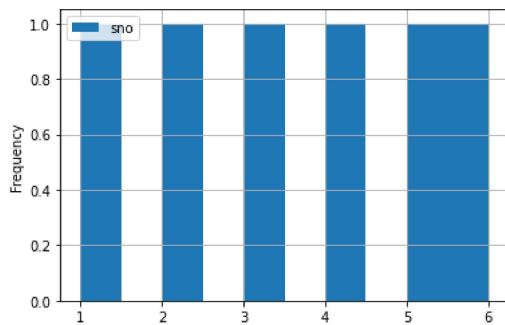
```
In [50]: fr.plot()
```

Out[50]: <AxesSubplot:>



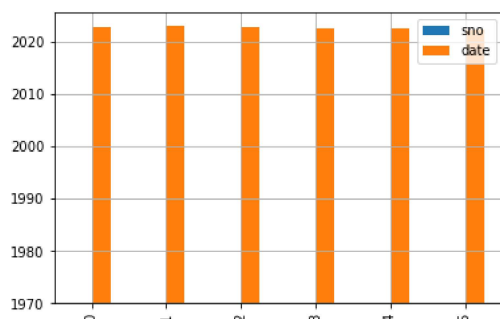
```
In [51]: fr.plot.hist(grid=True)
```

Out[51]: <AxesSubplot:ylabel='Frequency'>



In [52]: `fr.plot(kind="bar",grid=True)`

Out[52]: `<AxesSubplot:>`



Read TSV file

In [53]: `import pandas as pd
rs=pd.read_csv(r'Documents\tsv.txt',sep='\t')`

In [57]: `rs.head()`

Out[57]:

	Student_name	school_name	address	phone
0	raman	st.james hsc	palakurichy	34567...
1	vijay	mount zion hsc	pudukkottai	56789...
2	gopal	sri rajan hsc	madurai	98876...
3	arun	sboa hsc	thruchy	70788...

In [56]: `rs.tail()`

Out[56]:

	Student_name	school_name	address	phone
0	raman	st.james hsc	palakurichy	34567...
1	vijay	mount zion hsc	pudukkottai	56789...
2	gopal	sri rajan hsc	madurai	98876...
3	arun	sboa hsc	thruchy	70788...

In [34]: `rs.ndim`

Out[34]: 2

In [35]: `rs.shape`

Out[35]: (4, 1)

In [36]: `rs.size`

Out[36]: 4

In [37]: `rs.head(-2)`

Out[37]:

	Student_name	school_name	address	phone
0	raman	st.james hsc	palakurichy	34567...
1	vijay	mount zion hsc	pudukkottai	56789...

```
In [38]: rs.head()
```

Out[38]:

	Student_name	school_name	address	phone
0	raman	st.james hsc	palakurichy	34567...
1	vijay	mount zion hsc	pudukkottai	56789...
2	gopal sri rajan	hsc	madurai	98876...
3	arun sboa	hsc	thruchy	70788...

```
In [39]: rs.tail(-2)
```

Out[39]:

	Student_name	school_name	address	phone
2	gopal sri rajan	hsc	madurai	98876...
3	arun sboa	hsc	thruchy	70788...

Read XLS file

```
In [83]: sr=pd.read_excel('Documents\stud_det1.xlsx')
print(sr)
```

	S.no	Name	Dob	age	course
0	1	raja	2000-02-10	22	msc ds
1	2	guna	2002-05-02	20	msc cs
2	3	billa	1999-08-03	23	msc it
3	4	lokesh	1995-10-05	28	m.com
4	5	rolex	2002-12-12	20	b.com
5	6	dhilli	1998-01-23	23	mca
6	7	jd	1998-01-05	23	m.com
7	8	velu	2002-07-04	21	bca
8	9	sathya dev	2000-01-03	22	mca
9	10	muthu vel	2001-08-12	21	msc maths
10	11	saran	2000-04-14	22	bsc chemi
11	12	sai	2002-07-03	20	bsc mat
12	13	dhoni	2002-07-07	20	bsc it
13	14	virat	2003-11-18	19	viscom
14	15	vijay	2000-06-22	22	bba

```
In [85]: sr.head()
```

Out[85]:

	S.no	Name	Dob	age	course
0	1	raja	2000-02-10	22	msc ds
1	2	guna	2002-05-02	20	msc cs
2	3	billa	1999-08-03	23	msc it
3	4	lokesh	1995-10-05	28	m.com
4	5	rolex	2002-12-12	20	b.com

```
In [86]: sr.tail()
```

Out[86]:

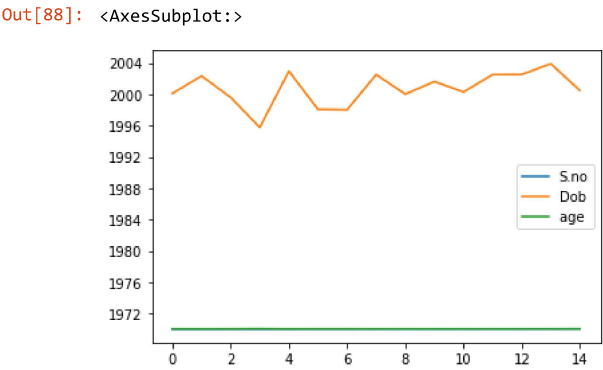
	S.no	Name	Dob	age	course
10	11	saran	2000-04-14	22	bsc chemi
11	12	sai	2002-07-03	20	bsc mat
12	13	dhoni	2002-07-07	20	bsc it
13	14	virat	2003-11-18	19	viscom
14	15	vijay	2000-06-22	22	bba

```
In [87]: sr.tail(-2)
```

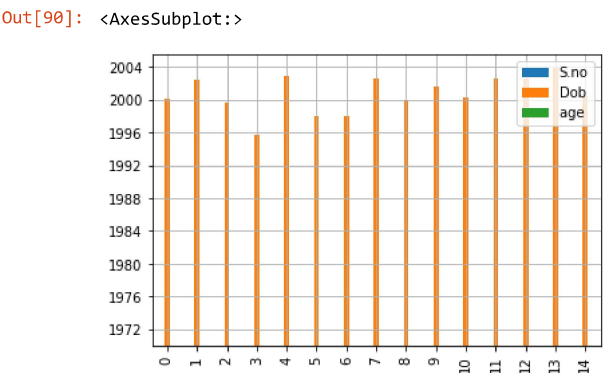
Out[87]:

	S.no	Name	Dob	age	course
2	3	billa	1999-08-03	23	msc it
3	4	lokes	1995-10-05	28	m.com
4	5	rolex	2002-12-12	20	b.com
5	6	dhilli	1998-01-23	23	mca
6	7	jd	1998-01-05	23	m.com
7	8	velu	2002-07-04	21	bca
8	9	sathya dev	2000-01-03	22	mca
9	10	muthu vel	2001-08-12	21	msc maths
10	11	saran	2000-04-14	22	bsc chemi
11	12	sai	2002-07-03	20	bsc mat
12	13	dhoni	2002-07-07	20	bsc it
13	14	virat	2003-11-18	19	viscom
14	15	vijay	2000-06-22	22	bba

```
In [88]: sr.plot()
```



```
In [90]: sr.plot(kind="bar",grid=True)
```

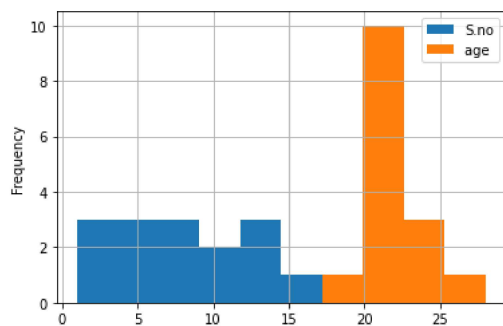


```
In [91]: print("shape:",sr.shape)
print("dimension:",sr.ndim)
print("size:",sr.size)
```

shape: (15, 5)
dimension: 2
size: 75

```
In [92]: sr.plot.hist(grid=True)
```

```
Out[92]: <AxesSubplot:ylabel='Frequency'>
```



word cloud

```
In [93]: !pip install wordcloud
```

Collecting wordcloud

Downloading wordcloud-1.8.2.2-cp39-cp39-win_amd64.whl (153 kB)

Requirement already satisfied: numpy>=1.6.1 in c:\anaconda\pspr\lib\site-packages (from wordcloud) (1.21.5)

Requirement already satisfied: pillow in c:\anaconda\pspr\lib\site-packages (from wordcloud) (9.0.1)

Requirement already satisfied: matplotlib in c:\anaconda\pspr\lib\site-packages (from wordcloud) (3.5.1)

Requirement already satisfied: pyparsing>=2.2.1 in c:\anaconda\pspr\lib\site-packages (from matplotlib->wordcloud) (3.0.4)

Requirement already satisfied: packaging>=20.0 in c:\anaconda\pspr\lib\site-packages (from matplotlib->wordcloud) (21.3)

Requirement already satisfied: kiwisolver>=1.0.1 in c:\anaconda\pspr\lib\site-packages (from matplotlib->wordcloud) (1.3.2)

Requirement already satisfied: cycler>=0.10 in c:\anaconda\pspr\lib\site-packages (from matplotlib->wordcloud) (0.11.0)

Requirement already satisfied: fonttools>=4.22.0 in c:\anaconda\pspr\lib\site-packages (from matplotlib->wordcloud) (4.25.0)

Requirement already satisfied: python-dateutil>=2.7 in c:\anaconda\pspr\lib\site-packages (from matplotlib->wordcloud) (2.8.2)

Requirement already satisfied: six>=1.5 in c:\anaconda\pspr\lib\site-packages (from python-dateutil>=2.7->matplotlib->wordcloud) (1.16.0)

Installing collected packages: wordcloud

Successfully installed wordcloud-1.8.2.2

```

In [136]: # Python program to generate WordCloud

# importing all necessary modules
from wordcloud import WordCloud, STOPWORDS
import matplotlib.pyplot as plt
import pandas as pd

# Reads 'Youtube04-Eminem.csv' file
txt= " hi everyone for all data science students"

comment_words = ''
stopwords = set(STOPWORDS)

# iterate through the csv file
for val in txt:

    # typecaste each val to string
    val = str(val)

    # split the value
    tokens = val.split()

    # Converts each token into lowercase
    for i in range(len(tokens)):
        tokens[i] = tokens[i].lower()

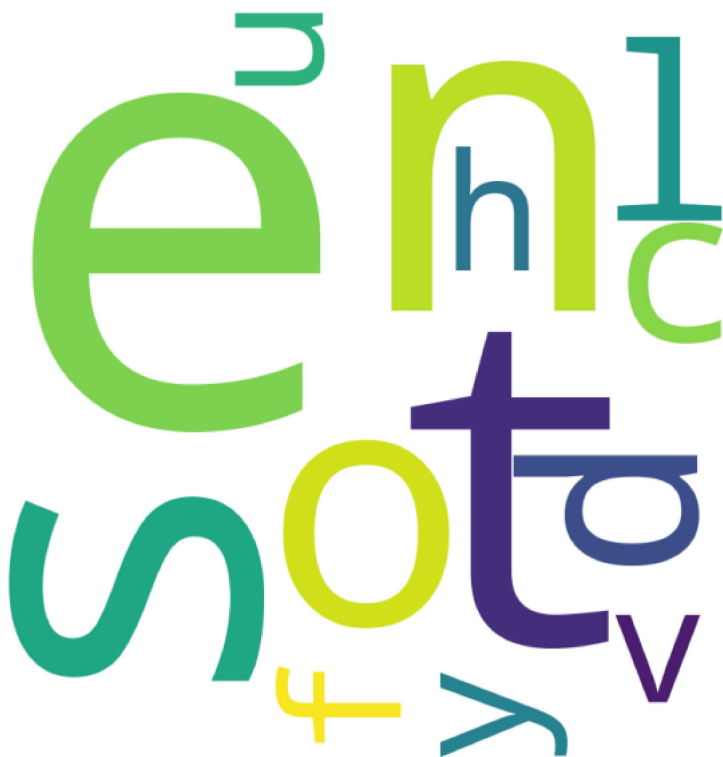
    comment_words += " ".join(tokens)+" "

wordcloud = WordCloud(width = 800, height = 800,
                      background_color = 'white',
                      stopwords = stopwords,
                      min_font_size = 10).generate(comment_words)

# plot the WordCloud image
plt.figure(figsize = (8, 8), facecolor = None)
plt.imshow(wordcloud)
plt.axis("off")
plt.tight_layout(pad = 0)

plt.show()

```



html

```
In [140]: with open("C:\\Users\\hp\\Downloads\\student_record.html ", "r") as d:
          print(d.read())
```

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <meta name="generator" content="PhpSpreadsheet, https://github.com/PHPOffice/PhpSpreadsheet> (https://github.com/PHPOffice/PhpSpreadsheet>)
    <meta name="author" content="hp" />
    <style type="text/css">
      html { font-family:Calibri, Arial, Helvetica, sans-serif; font-size:11pt; background-color:white }
      a.comment-indicator:hover + div.comment { background:#ffd; position:absolute; display:block; border:1px solid black; padding:0.5em }
      a.comment-indicator { background:red; display:inline-block; border:1px solid black; width:0.5em; height:0.5em }
      div.comment { display:none }
      table { border-collapse:collapse; page-break-after:always }
      .gridlines td { border:1px dotted black }
      .gridlines th { border:1px dotted black }
      .b { text-align:center }
      .e { text-align:center }
      .f { text-align:right }
    </style>
  </head>
  <body>
```

json

```
In [145]: with open("C:\\Users\\hp\\Downloads\\student.json ", "r") as f:
          print(f.read())
```

```
[
  {
    "A": "name ",
    "B": "rno",
    "C": "year ",
    "D": "course ",
    "E": "dept"
  },
  {
    "A": "vijay ",
    "B": "430",
    "C": "1st",
    "D": "bsc cs ",
    "E": "cs"
  },
  {
    "A": "sai saran ",
    "B": "340",
    "C": "2nd",
    "D": "msc it",
    "E": "it"
  },
  {
    "A": "arun",
    "B": "123",
    "C": "3rd ",
    "D": "bca",
    "E": "cs"
  },
  {
    "A": "vikram ",
    "B": "210",
    "C": "1st",
    "D": "mca",
    "E": "cs"
  }
]
```

arff


```
In [146]: ► with open("C:\\Users\\hp\\Downloads\\student_record.arff ", "r") as h:  
            print(h.read())
```

```
@RELATION student_record
```

```
@ATTRIBUTE attribute_0 {arun,123,3rd ,bca,cs,name ,rno,year ,course ,dept,sai saran ,340,2nd,msc it,it,vijay ,430,1st,bsc cs  
,cs,vikram ,210,1st,mca,cs}
```

```
@DATA
```

```
name ,rno,year ,course ,dept  
vijay ,430,1st,bsc cs ,cs  
sai saran ,340,2nd,msc it,it  
arun,123,3rd ,bca,cs  
vikram ,210,1st,mca,cs
```

```
In [ ]: ►
```