

```
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np

# Read the Excel file (replace 'filename.xlsx' with your actual file name)
df = pd.read_excel("Marks_secC.xlsx")
# print(df)
# Add a percentage column
df['Percentage'] = (df['marks'] / 15) * 100
var = 'name', 'library id', 'marks', 'percentage'
# Categorize students
above_75 = df.var
between_60_75 = df[(df['Percentage'] >= 60) & (df['Percentage'] <= 75)].var
below_60 = df[df['Percentage'] < 60].var
# Print categories
print("Students with >75% marks:\n", above_75, "\n")
print("Students with 60%-75% marks:\n", between_60_75, "\n")
print("Students with <60% marks:\n", below_60, "\n")

# Histogram Plot
plt.figure(figsize=(10, 5))
plt.hist(df['Percentage'], bins=np.arange(0, 105, 5), edgecolor='black', color='blue')
plt.xlabel("Percentage")
plt.ylabel("Number of Students")
plt.title("Histogram Plot")
plt.grid(True)
plt.show()

# Scatter Plot
plt.figure(figsize=(10, 5))
plt.scatter(df['name'], df['Percentage'], color='blue', edgecolors='black')
plt.xticks(rotation=90)
plt.xlabel("Students")
plt.ylabel("Percentage")
plt.title("Scatter Plot")
plt.grid(True)
plt.tight_layout()
plt.show()
```



Students with >75% marks:

```
<bound method DataFrame.var of
lib id name
0 2428ECE1110 SHIKHA SINGH shikha.2428ece1110@kiet.edu
1 2428ECE1733 UJJWAL MISHRA ujjwal.2428ece1733@kiet.edu
2 2428ECE1761 SUMIT SINGH sumit.2428ece1761@kiet.edu
3 2428ECE2490 SUKHVEER SINGH YADAV sukhveer.2428ece2490@kiet.edu
4 2428ECE968 SHIVA YADAV shiva.2428ece968@kiet.edu
.. ...
62 2428ECE1034 SIDDHI KUMARI siddhi.2428ece1034@kiet.edu
63 2428ECE1797 SHREYA SHUKLA shreya.2428ece1797@kiet.edu
64 2428ECE2145 YASHVI TOMAR yashvi.2428ece2145@kiet.edu
65 2428ECE1012 SANDRBH DIXIT sandrbh.2428ece1012@kiet.edu
66 2428ECE1328 SHIV SHARMA shiv.2428ece1328@kiet.edu
```

email \

	session	data	statuss	marks	submit?	Percentage
0	2024-2028-ECE-C	10 Apr 15:00:26	Completed	7.00	True	46.666667
1	2024-2028-ECE-C	10 Apr 15:00:31	Completed	11.00	True	73.333333
2	2024-2028-ECE-C	10 Apr 15:00:33	Completed	13.00	True	86.666667
3	2024-2028-ECE-C	10 Apr 15:00:36	Completed	8.10	True	54.000000
4	2024-2028-ECE-C	10 Apr 15:00:37	Completed	9.00	True	60.000000
..
62	2024-2028-ECE-C	10 Apr 15:06:23	Completed	8.10	True	54.000000
63	2024-2028-ECE-C	10 Apr 15:06:25	Completed	5.32	True	35.466667
64	2024-2028-ECE-C	10 Apr 15:06:53	Completed	4.00	True	26.666667
65	2024-2028-ECE-C	10 Apr 15:09:57	Completed	2.00	True	13.333333
66	2024-2028-ECE-C	10 Apr 15:11:27	Completed	12.00	True	80.000000

[67 rows x 9 columns]>

Students with 60%-75% marks:

```
<bound method DataFrame.var of
lib id name
1 2428ECE1733 UJJWAL MISHRA ujjwal.2428ece1733@kiet.edu
4 2428ECE968 SHIVA YADAV shiva.2428ece968@kiet.edu
11 2428ECE2092 SHUBHAM PATEL shubham.2428ece2092@kiet.edu
24 2428ECE2102 UTSAV KUNAL SINGH utsav.2428ece2102@kiet.edu
30 2428ECE1878 YASHRAJ SINGH yashraj.2428ece1878@kiet.edu
32 2428ECE1233 VIVEK KUMAR vivek.2428ece1233@kiet.edu
33 2428ECE2481 SAKSHAM AGARWAL saksham.2428ece2481@kiet.edu
40 2428ECE1382 SHREEJA KASHYAP shreeja.2428ece1382@kiet.edu
41 2428ECE1101 VIDHIKA SINGH vidhika.2428ece1101@kiet.edu
43 2428ECE1265 YATHARTH MALVIYA yatharth.2428ece1265@kiet.edu
49 2428ECE733 UJJAWAL SINGH ujjawal.2428ece733@kiet.edu
51 2428ECE1642 SHUBH AWASTHI shubh.2428ece1642@kiet.edu
```

email \

	session	data	statuss	marks	submit?	Percentage
1	2024-2028-ECE-C	10 Apr 15:00:31	Completed	11.00	True	73.333333
4	2024-2028-ECE-C	10 Apr 15:00:37	Completed	9.00	True	60.000000
11	2024-2028-ECE-C	10 Apr 15:00:45	Completed	10.20	True	68.000000
24	2024-2028-ECE-C	10 Apr 15:00:53	Completed	11.00	True	73.333333
30	2024-2028-ECE-C	10 Apr 15:01:01	Completed	10.30	True	68.666667
32	2024-2028-ECE-C	10 Apr 15:01:06	Completed	10.00	True	66.666667
33	2024-2028-ECE-C	10 Apr 15:01:11	Completed	11.00	True	73.333333
40	2024-2028-ECE-C	10 Apr 15:01:40	Completed	10.40	True	69.333333
41	2024-2028-ECE-C	10 Apr 15:01:41	Completed	11.18	True	74.533333
43	2024-2028-ECE-C	10 Apr 15:01:55	Completed	10.40	True	69.333333
49	2024-2028-ECE-C	10 Apr 15:02:38	Completed	9.00	True	60.000000
51	2024-2028-ECE-C	10 Apr 15:02:50	Completed	9.20	True	61.333333

Students with <60% marks:

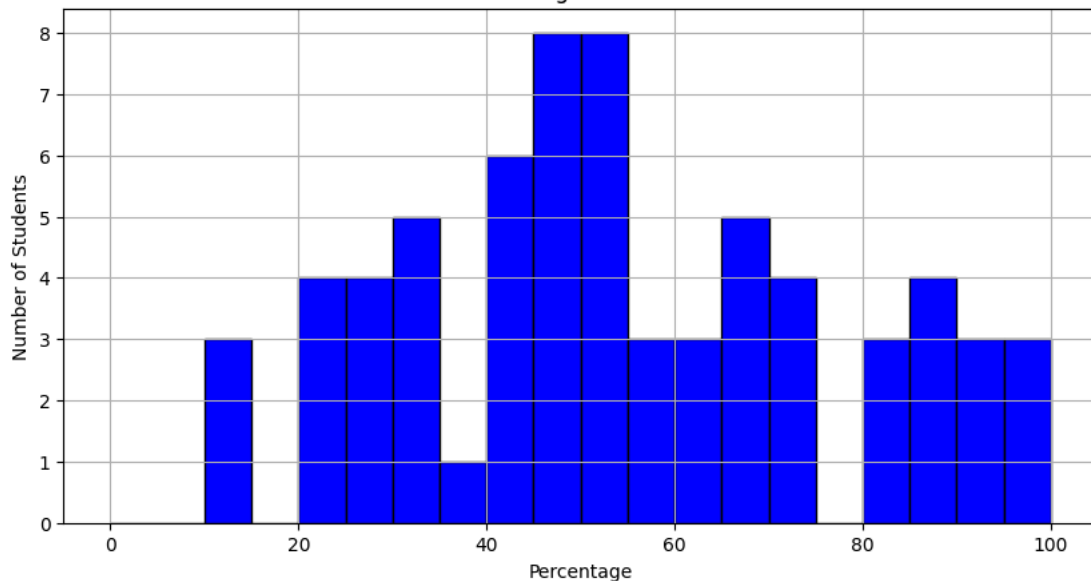
```
<bound method DataFrame.var of
lib id name
0 2428ECE1110 SHIKHA SINGH shikha.2428ece1110@kiet.edu
3 2428ECE2490 SUKHVEER SINGH YADAV sukhveer.2428ece2490@kiet.edu
6 2428ECE2593 Suman Yadav suman.2428ece2593@kiet.edu
7 2428ECE2411 SHIVAM YADAV shivam.2428ece2411@kiet.edu
8 2428ECE456 SHUBH RAGHAV shubh.2428ece456@kiet.edu
9 2428ECE1629 SAURABH DIXIT saurabh.2428ece1629@kiet.edu
10 2428ECE1950 SMRITY SHARMA smrity.2428ece1950@kiet.edu
12 2428ECE1465 SRISHTI SINGH srishiti.2428ece1465@kiet.edu
13 2428ECE565 SHRADDHA TIWARI shraddha.2428ece565@kiet.edu
14 2428ECE465 VANSI GAUTAM vansi.2428ece465@kiet.edu
15 2428ECE2150 SHIVANSH VERMA shivansh.2428ece2150@kiet.edu
17 2428ECE2283 SOMVEER somveer.2428ece2283@kiet.edu
18 2428ECE873 SATWIK SRIVASTAVA satwik.2428ece873@kiet.edu
19 2428ECE1184 RISHI RAJ rishi.2428ece1184@kiet.edu
20 2428ECE2012 VARUN PAL varun.2428ece2012@kiet.edu
21 2428ECE571 SANJAY KUMAR GUPTA sanjay.2428ece571@kiet.edu
22 2428ECE1251 SHREYA shreya.2428ece1251@kiet.edu
23 2428ECE2472 SUMIT KUMAR MANDAL sumit.2428ece2472@kiet.edu
25 2428ECE455 SANIYA saniya.2428ece455@kiet.edu
26 2428ECE2431 VIVEK KUMAR vivek.2428ece2431@kiet.edu
29 2428ECE621 VANSHIKA vanshika.2428ece621@kiet.edu
34 2428ECE1707 VANSI VARSHNEY vansi.2428ece1707@kiet.edu
36 2428ECE1254 SURYA PRAKASH surya.2428ece1254@kiet.edu
37 2428ECE1267 SHIVAM SINGH shivam.2428ece1267@kiet.edu
38 2428ECE1928 SHIVAM SINGH shivam.2428ece1928@kiet.edu
39 2428ECE1259 UTKARSH KUMAR utkarsh.2428ece1259@kiet.edu
42 2428ECE2483 SHREYASVI SRIVASTAVA shreyasvi.2428ece2483@kiet.edu
44 2428ECE462 SIDDHANT RAGHUVANSHI siddhant.2428ece462@kiet.edu
46 2428ECE2405 SHWETA BHARTI shweta.2428ece2405@kiet.edu
47 2428ECE2204 SARTHAK GOYAL sarthak.2428ece2204@kiet.edu
```

email \

48	2428ECE1704	SHIVAM SINGH	shivam.2428ece1704@kiet.edu
52	2428ECE1314	SUMIT YAGYASAINI	sumit.2428ece1314@kiet.edu
53	2428ECE461	RUDRA DEV MUDGAL	rudra.2428ece461@kiet.edu
55	2428ECE764	TANNU SHARMA	tannu.2428ece764@kiet.edu
56	2428ECE1037	SHREE JAISWAL	shree.2428ece1037@kiet.edu
57	2428ECE855	VISHAL TYAGI	vishal.2428ece855@kiet.edu
60	2428ECE1987	SHILPI KUMARI	shilpi.2428ece1987@kiet.edu
61	2428ECE2402	YASH PANDEY	yash.2428ece2402@kiet.edu
62	2428ECE1034	SIDDHI KUMARI	siddhi.2428ece1034@kiet.edu
63	2428ECE1797	SHREYA SHUKLA	shreya.2428ece1797@kiet.edu
64	2428ECE2145	YASHVI TOMAR	yashvi.2428ece2145@kiet.edu
65	2428ECE1012	SANDBH DIXIT	sandrbh.2428ece1012@kiet.edu

	session	data	statuss	marks	submit?	Percentage
0	2024-2028-ECE-C	10 Apr 15:00:26	Completed	7.00	True	46.666667
3	2024-2028-ECE-C	10 Apr 15:00:36	Completed	8.10	True	54.000000
6	2024-2028-ECE-C	10 Apr 15:00:40	Completed	5.00	True	33.333333
7	2024-2028-ECE-C	10 Apr 15:00:42	Completed	4.90	True	32.666667
8	2024-2028-ECE-C	10 Apr 15:00:43	Completed	6.30	True	42.000000
9	2024-2028-ECE-C	10 Apr 15:00:45	Completed	6.10	True	40.666667
10	2024-2028-ECE-C	10 Apr 15:00:45	Completed	7.00	True	46.666667
12	2024-2028-ECE-C	10 Apr 15:00:45	Completed	5.10	True	34.000000
13	2024-2028-ECE-C	10 Apr 15:00:45	Completed	7.00	True	46.666667
14	2024-2028-ECE-C	10 Apr 15:00:46	Completed	7.50	True	50.000000
15	2024-2028-ECE-C	10 Apr 15:00:48	Completed	3.40	True	22.666667
17	2024-2028-ECE-C	10 Apr 15:00:49	Completed	7.00	True	46.666667
18	2024-2028-ECE-C	10 Apr 15:00:49	Completed	8.10	True	54.000000
19	2024-2028-ECE-C	10 Apr 15:00:50	Completed	6.40	True	42.666667
20	2024-2028-ECE-C	10 Apr 15:00:51	Completed	8.20	True	54.666667
21	2024-2028-ECE-C	10 Apr 15:00:52	Completed	3.00	True	20.000000
22	2024-2028-ECE-C	10 Apr 15:00:52	Completed	7.00	True	46.666667
23	2024-2028-ECE-C	10 Apr 15:00:53	Completed	7.00	True	46.666667
25	2024-2028-ECE-C	10 Apr 15:00:55	Completed	7.60	True	50.666667
26	2024-2028-ECE-C	10 Apr 15:00:56	Completed	3.00	True	20.000000
29	2024-2028-ECE-C	10 Apr 15:01:01	Completed	4.00	True	26.666667
34	2024-2028-ECE-C	10 Apr 15:01:24	Completed	7.00	True	46.666667
36	2024-2028-ECE-C	10 Apr 15:01:28	Completed	8.00	True	53.333333
37	2024-2028-ECE-C	10 Apr 15:01:29	Completed	6.00	True	40.000000
38	2024-2028-ECE-C	10 Apr 15:01:30	Completed	4.00	True	26.666667
39	2024-2028-ECE-C	10 Apr 15:01:32	Completed	8.30	True	55.333333
42	2024-2028-ECE-C	10 Apr 15:01:53	Completed	2.20	True	14.666667
44	2024-2028-ECE-C	10 Apr 15:01:56	Completed	5.00	True	33.333333
46	2024-2028-ECE-C	10 Apr 15:02:07	Completed	5.00	True	33.333333
47	2024-2028-ECE-C	10 Apr 15:02:15	Completed	4.00	True	26.666667
48	2024-2028-ECE-C	10 Apr 15:02:23	Completed	6.00	True	40.000000
52	2024-2028-ECE-C	10 Apr 15:02:55	Completed	8.50	True	56.666667
53	2024-2028-ECE-C	10 Apr 15:03:05	Completed	8.20	True	54.666667
55	2024-2028-ECE-C	10 Apr 15:03:16	Completed	2.00	True	13.333333
56	2024-2028-ECE-C	10 Apr 15:03:18	Completed	8.60	True	57.333333
57	2024-2028-ECE-C	10 Apr 15:04:08	Completed	7.00	True	46.666667
60	2024-2028-ECE-C	10 Apr 15:05:31	Completed	3.00	True	20.000000
61	2024-2028-ECE-C	10 Apr 15:06:17	Completed	6.30	True	42.000000
62	2024-2028-ECE-C	10 Apr 15:06:23	Completed	8.10	True	54.000000
63	2024-2028-ECE-C	10 Apr 15:06:25	Completed	5.32	True	35.466667
64	2024-2028-ECE-C	10 Apr 15:06:53	Completed	4.00	True	26.666667
65	2024-2028-ECE-C	10 Apr 15:09:57	Completed	2.00	True	13.333333

Histogram Plot



Scatter Plot

