

Name – Sanskruti Shetiya

Practical No.1

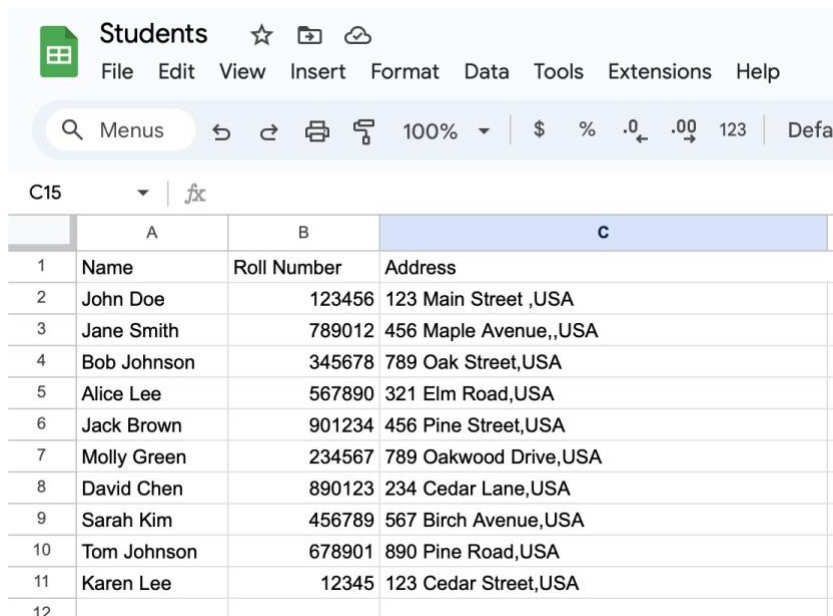
Roll Number - 282

Batch - B4

Title - Take/Prepare any text files for any real-life application. Make 3 files and then merge them as one and perform all statistical analysis(Average,Max,Min,Count,Sum,Percentage)

Note: - We have created 10 entries for all the 4 files.

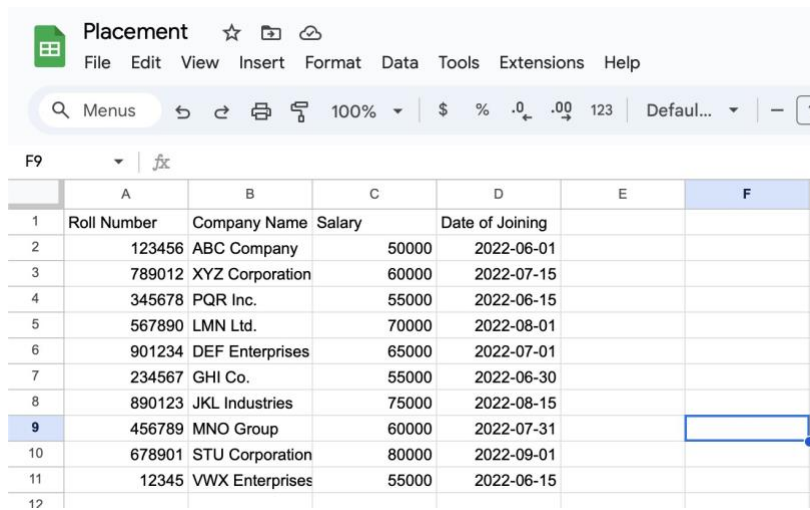
Creating Students.csv file



The screenshot shows a Google Sheet titled "Students" with a menu bar (File, Edit, View, Insert, Format, Data, Tools, Extensions, Help) and a toolbar. The active cell is C15. The table contains the following data:

	A	B	C
1	Name	Roll Number	Address
2	John Doe	123456	123 Main Street ,USA
3	Jane Smith	789012	456 Maple Avenue,,USA
4	Bob Johnson	345678	789 Oak Street,USA
5	Alice Lee	567890	321 Elm Road,USA
6	Jack Brown	901234	456 Pine Street,USA
7	Molly Green	234567	789 Oakwood Drive,USA
8	David Chen	890123	234 Cedar Lane,USA
9	Sarah Kim	456789	567 Birch Avenue,USA
10	Tom Johnson	678901	890 Pine Road,USA
11	Karen Lee	12345	123 Cedar Street,USA
12			

Creating Placements.csv file



The screenshot shows a Google Sheet titled "Placement" with a menu bar (File, Edit, View, Insert, Format, Data, Tools, Extensions, Help) and a toolbar. The active cell is F9. The table contains the following data:

	A	B	C	D	E	F
1	Roll Number	Company Name	Salary	Date of Joining		
2	123456	ABC Company	50000	2022-06-01		
3	789012	XYZ Corporation	60000	2022-07-15		
4	345678	PQR Inc.	55000	2022-06-15		
5	567890	LMN Ltd.	70000	2022-08-01		
6	901234	DEF Enterprises	65000	2022-07-01		
7	234567	GHI Co.	55000	2022-06-30		
8	890123	JKL Industries	75000	2022-08-15		
9	456789	MNO Group	60000	2022-07-31		
10	678901	STU Corporation	80000	2022-09-01		
11	12345	VWX Enterprises	55000	2022-06-15		
12						

Creating Results.csv file

Results

File Edit View Insert Format Data Tools Extensions Help

100% 123 Default... 10 B I

114

	A	B	C	D	E	F
1	Roll Number	Computer	Physics	Applied Mechanics	Chemistry	Design Engineering
2	123456	75	85	90	80	70
3	789012	80	85	95	90	80
4	345678	70	75	80	85	90
5	567890	90	85	80	95	90
6	901234	80	85	90	95	90
7	234567	75	80	85	90	95
8	890123	85	90	95	90	85
9	456789	80	90	85	95	90
10	678901	95	90	80	85	90
11	12345	70	80	75	85	90

Merging all 3 files as StudentDetails.csv

StudentDetails

File Edit View Insert Format Data Tools Extensions Help

100% 123 Default... 10 B I A

H17:H18

	A	B	C	D	E	F	G	H	I	J	K
1	Name	Roll Number	Address	Company Name	Salary	Date of Joining	Computer	Physics	Applied Mechanics	Chemistry	Design Engineering
2	John Doe	123456	123 Main Street,USA	ABC Company	50000	2022-06-01	75	85	21	80	59
3	Jane Smith	789012	456 Maple Avenue,USA	XYZ Corporation	60000	2022-07-15	80	85	44	90	80
4	Bob Johnson	345678	789 Oak Street,USA	PQR Inc.	55000	2022-06-15	57	75	80	55	43
5	Alice Lee	567890	321 Elm Road,USA	LMN Ltd.	70000	2022-08-01	90	85	44	95	53
6	Jack Brown	901234	456 Pine Street,USA	DEF Enterprises	65000	2022-07-01	30	52	90	95	90
7	Molly Green	234567	789 Oakwood Drive,USA	GHI Co.	55000	2022-06-30	75	80	55	90	54
8	David Chen	890123	234 Cedar Lane,USA	JKL Industries	75000	2022-08-15	85	90	95	90	85
9	Sarah Kim	456789	567 Birch Avenue,USA	MNO Group	60000	2022-07-31	44	90	85	48	90
10	Tom Johnson	678901	890 Pine Road,USA	STU Corporation	80000	2022-09-01	95	90	80	85	51
11	Karen Lee	12345	123 Cedar Street,USA	VWX Enterprises	55000	2022-06-15	70	80	37	45	90

Statistical functions

Average Score for each subject

```
Average score for Computer: 70.1
Average score for Physics: 81.2
Average score for Applied Mechanics: 63.1
Average score for Chemistry: 77.3
Average score for Design Engineering: 69.5
```

Maximum Score for each subject

```
Maximum score in Computer: 95
Maximum score in Physics: 90
Maximum score in Applied Mechanics: 95
Maximum score in Chemistry: 95
Maximum score in Design Engineering: 90
```

Minimum Score for each subject

```
Minimum score in Computer: 30
Minimum score in Physics: 52
Minimum score in Applied Mechanics: 21
Minimum score in Chemistry: 43
Minimum score in Design Engineering: 43
```

Total Score for Each Subject

```
Total score for Computer: 701
Total score for Physics: 812
Total score for Applied Mechanics: 631
Total score for Chemistry: 773
Total score for Design Engineering: 695
```

Number of Students scoring above 60 in each subject

```
Above 60 in Computer: 7
Above 60 in Physics: 9
Above 60 in Applied Mechanics: 5
Above 60 in Chemistry: 7
Above 60 in for Design Engineering: 5
```

Salary Analysis

```
Minimum Salary: 50000
Maximum Salary: 80000
Average Salary: 62500.0
```

Plotting some of the functionalities

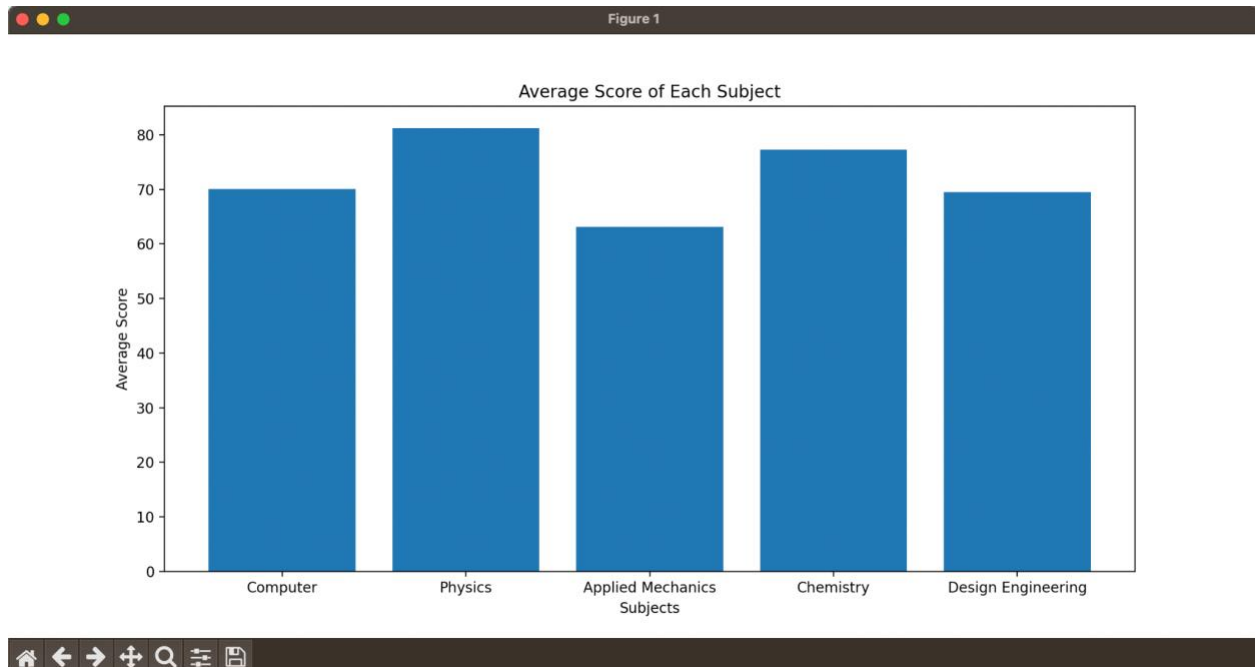


Fig 1) Average Score of Each Subject

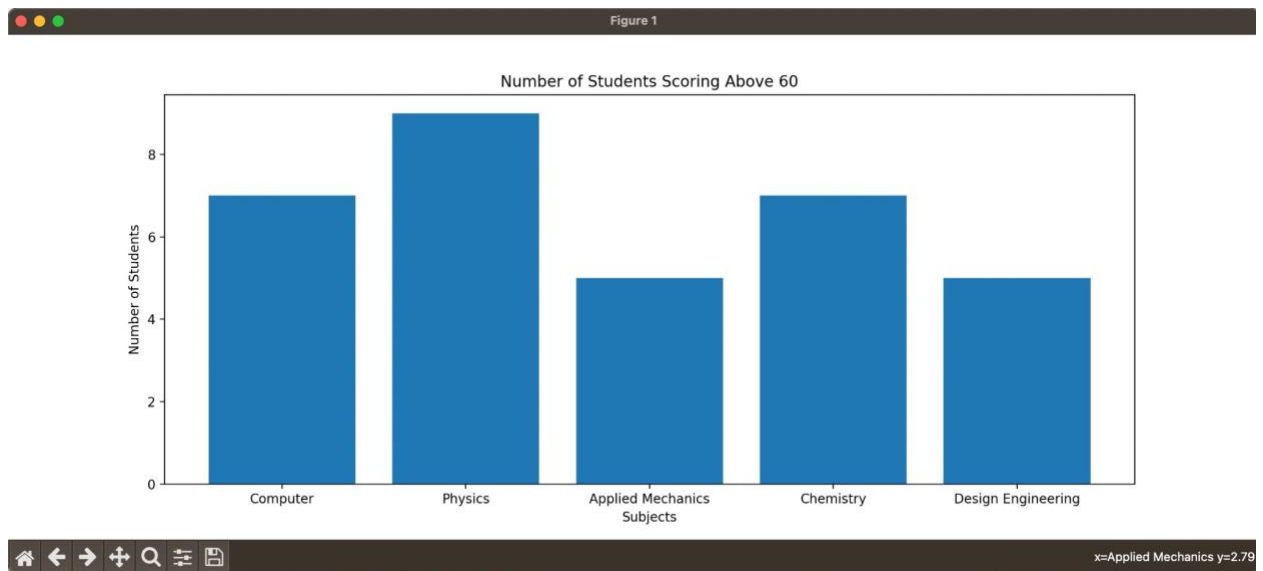


Fig 2) Number of Students scoring above 60

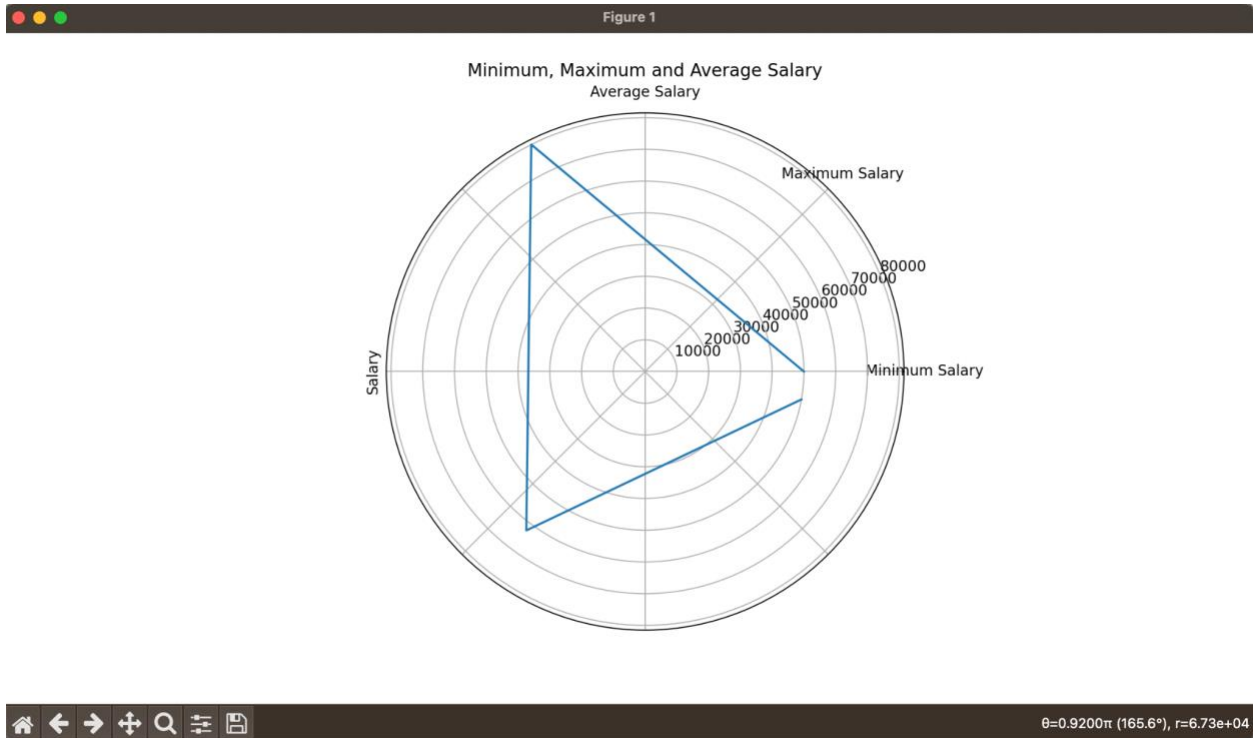


Fig 3) Circular plot for salary analysis

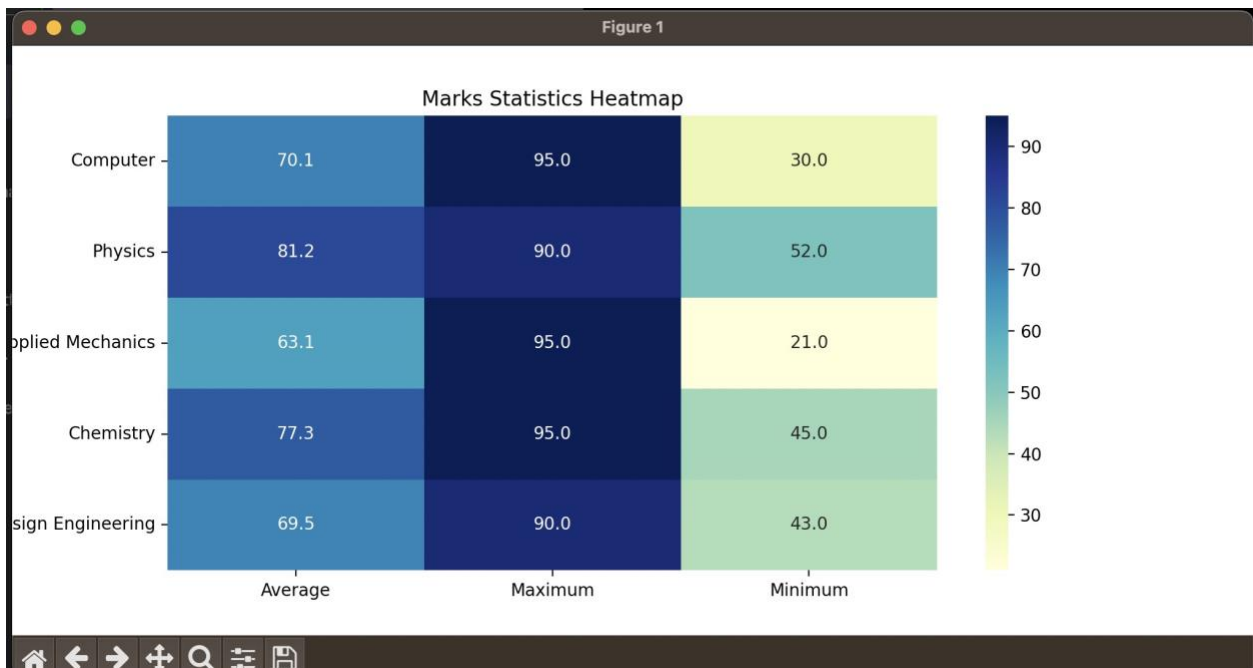


Fig 4) Heatmap for Marks