

Name - Ojas Denge
Division - G (4)
Roll No. - 777
PRN No. - 202201070072

EDS PRACTICAL-1

Code:

```
import pandas as pd

# Load the student ID and name from the "Stud.txt" file
stud_data = pd.read_csv("/content/drive/MyDrive/Colab Notebooks/Assignment-1/Student.csv")

# Load the placement data from the "Placement.csv" file
placement_data = pd.read_csv("/content/drive/MyDrive/Colab Notebooks/Assignment-1/Placement.csv")

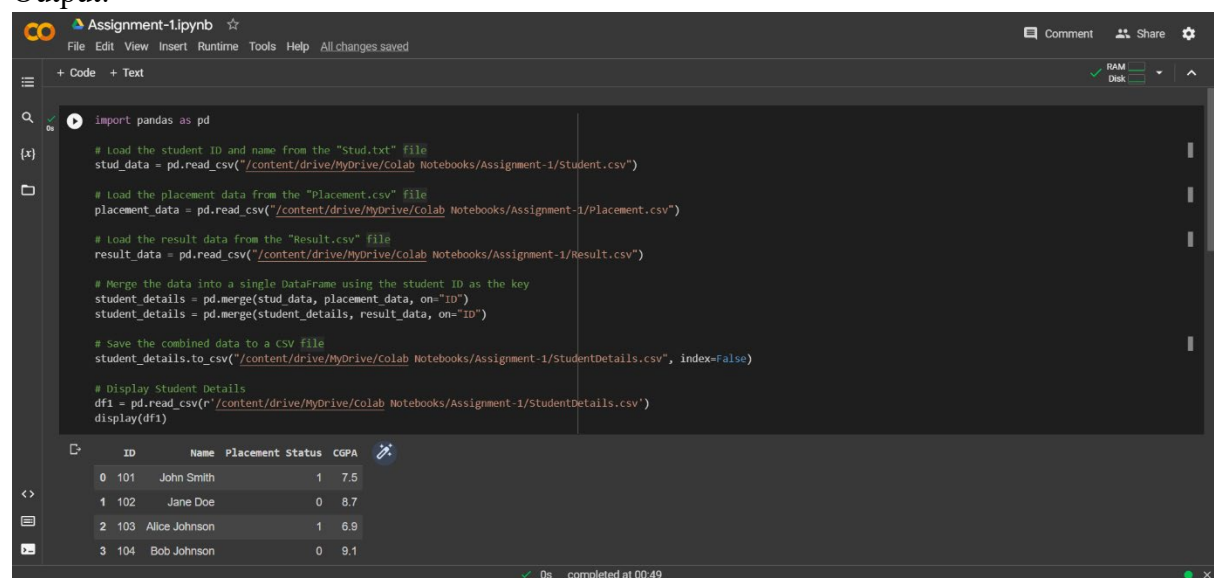
# Load the result data from the "Result.csv" file
result_data = pd.read_csv("/content/drive/MyDrive/Colab Notebooks/Assignment-1/Result.csv")

# Merge the data into a single DataFrame using the student ID as the key
student_details = pd.merge(stud_data, placement_data, on="ID")
student_details = pd.merge(student_details, result_data, on="ID")

# Save the combined data to a CSV file
student_details.to_csv("/content/drive/MyDrive/Colab Notebooks/Assignment-1/StudentDetails.csv",
index=False)

# Display Student Details
df1 = pd.read_csv(r'/content/drive/MyDrive/Colab Notebooks/Assignment-1/StudentDetails.csv')
display(df1)
```

Output:



The screenshot shows a Google Colab notebook titled "Assignment-1.ipynb". The code cell contains the same Python script as shown in the "Code" section. The output of the script is a DataFrame with 4 rows and 5 columns: ID, Name, Placement, Status, and CGPA. The data is as follows:

	ID	Name	Placement	Status	CGPA
0	101	John Smith	1	7.5	
1	102	Jane Doe	0	8.7	
2	103	Alice Johnson	1	6.9	
3	104	Bob Johnson	0	9.1	

The notebook interface shows the code cell is executed, and the output is displayed in a table format. The status bar at the bottom indicates the notebook is completed at 00:49.

Code:

```
# Load the combined data from the "StudentDetails.csv" file
student_details = pd.read_csv("/content/drive/MyDrive/Colab Notebooks/Assignment-1/StudentDetails.csv")

# Calculate the average CGPA
avg_cgpa = student_details["CGPA"].mean()

# Calculate the maximum CGPA
max_cgpa = student_details["CGPA"].max()

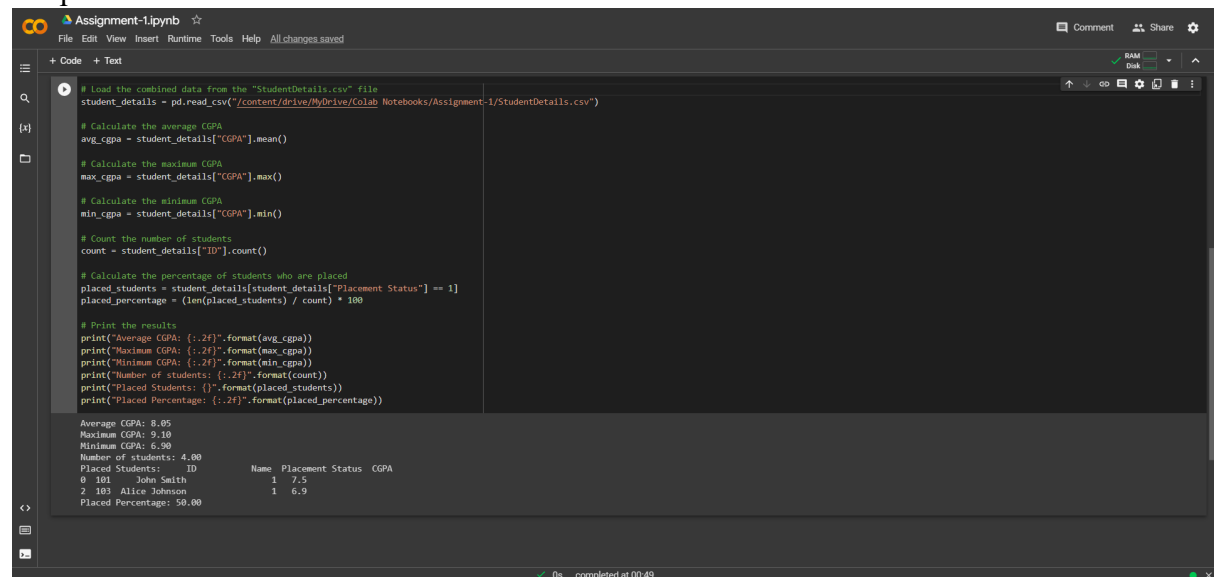
# Calculate the minimum CGPA
min_cgpa = student_details["CGPA"].min()

# Count the number of students
count = student_details["ID"].count()

# Calculate the percentage of students who are placed
placed_students = student_details[student_details["Placement Status"] == 1]
placed_percentage = (len(placed_students) / count) * 100

# Print the results
print("Average CGPA: {:.2f}".format(avg_cgpa))
print("Maximum CGPA: {:.2f}".format(max_cgpa))
print("Minimum CGPA: {:.2f}".format(min_cgpa))
print("Number of students: {:.2f}".format(count))
print("Placed Students: {}".format(placed_students))
print("Placed Percentage: {:.2f}".format(placed_percentage))
```

Output:



The screenshot shows a Google Colab notebook titled "Assignment-1.ipynb". The code cell contains the same Python code as shown in the "Code" section. The output cell displays the following results:

```
Average CGPA: 8.85
Maximum CGPA: 9.10
Minimum CGPA: 6.90
Number of students: 4.00
Placed Students:
ID      Name  Placement Status  CGPA
0  101  John Smith             1    7.5
2  103  Alice Johnson          1    6.9
Placed Percentage: 50.00
```

At the bottom of the notebook, a status bar indicates "0s completed at 00:49".

Google Colab Link: <https://colab.research.google.com/drive/1rZetINUegCObbBIM3zcBBY-G5tQh9HjU?usp=sharing>