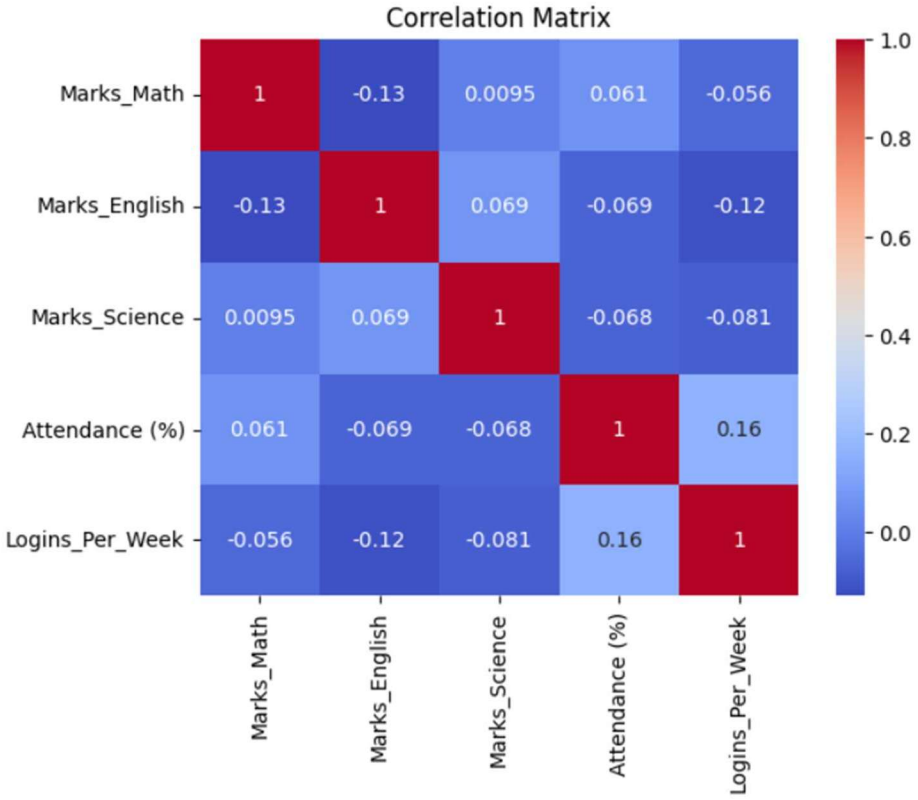
OUTPUT SCREENSHOTS

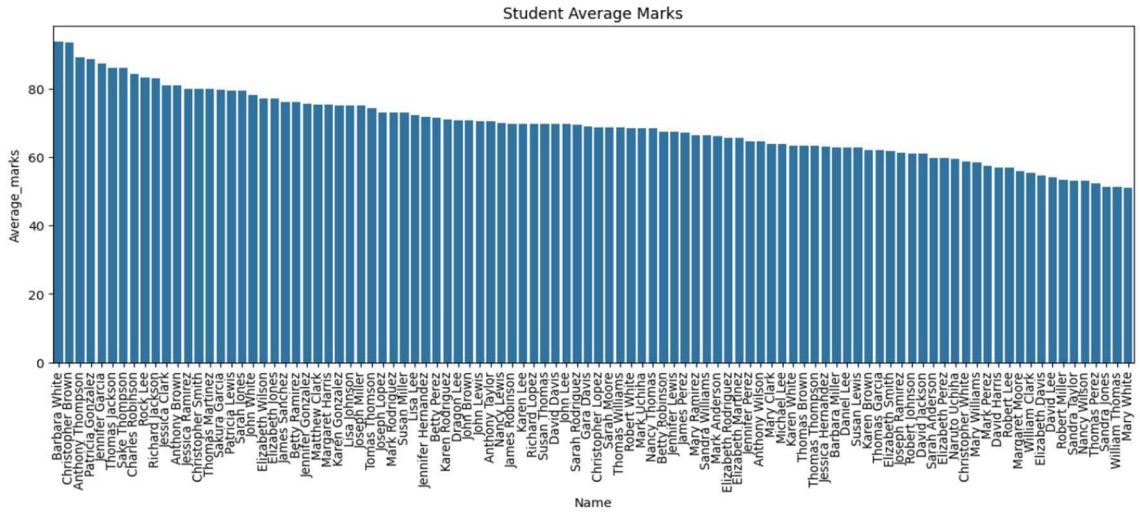
Correlation Matrix

```
corr = df[['Marks_Math', 'Marks_English', 'Marks_Science', 'Attendance (%)', 'Logins_Per_Week']].corr()
sns.heatmap(corr, annot=True, cmap='coolwarm')
plt.title('Correlation Matrix')
plt.show()
```



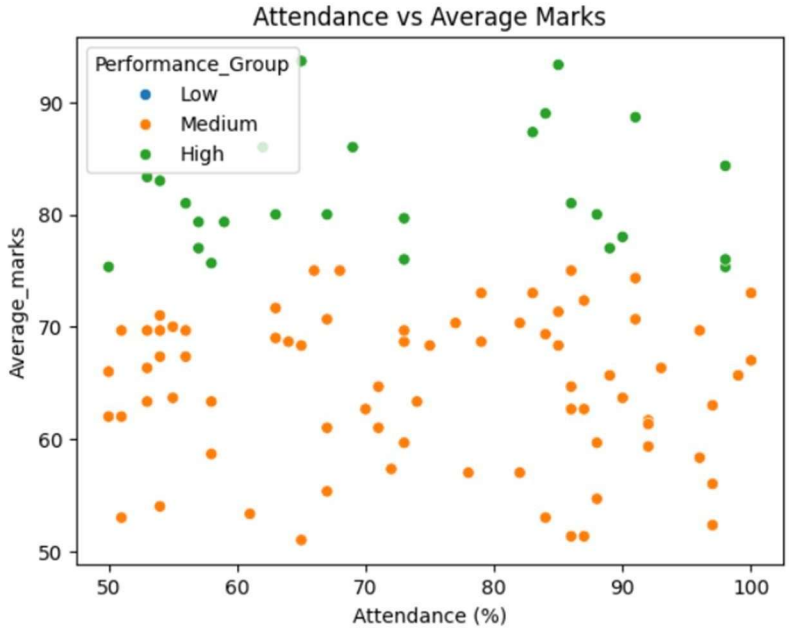
Student Average Marks

```
df_sorted = df.sort_values(by='Average_marks', ascending=False)
plt.figure(figsize=(15,5))
sns.barplot(data=df_sorted, x='Name', y='Average_marks')
plt.title('Student Average Marks')
plt.xticks(rotation=90)
plt.show()
```



Attendance VS Average Mark

```
df['Performance_Group'] = pd.cut(df['Average_marks'], bins=[0, 50, 75, 100], labels=['Low', 'Medium', 'High'])
sns.scatterplot(data=df, x='Attendance (%)', y='Average_marks', hue='Performance_Group')
plt.title('Attendance vs Average Marks')
plt.show()
```



Top Students and Struggling Students

Top Students:

	Name	Total_marks	Attendance (%)
67	Barbara White	281	65
65	Christopher Brown	280	85
2	Anthony Thompson	267	84
19	Patricia Gonzalez	266	91
40	Jennifer Garcia	262	83

Struggling Students:

	Name	Total_marks	Attendance (%)
51	Nancy Wilson	159	51
1	Thomas Perez	157	97
24	Sandra Jones	154	86
73	William Thomas	154	87
26	Mary White	153	65

Student Performance Anlaytics Dashboard