

# Class 12 IP Project

Name: Kratika Chichani

Roll No: 16

Topic: Student Academic Performance using Python

```
# Step 1: Import libraries
import pandas as pd
import matplotlib.pyplot as plt

# Step 2: Create Data
data = { ... } # Student marks data
df = pd.DataFrame(data)
print(df)

# Step 3: Calculate Total and Percentage
df['Total'] = df[['Math', 'English', 'Science', 'History', 'Computer']].sum(axis=1)
df['Percentage'] = df['Total'] / 5

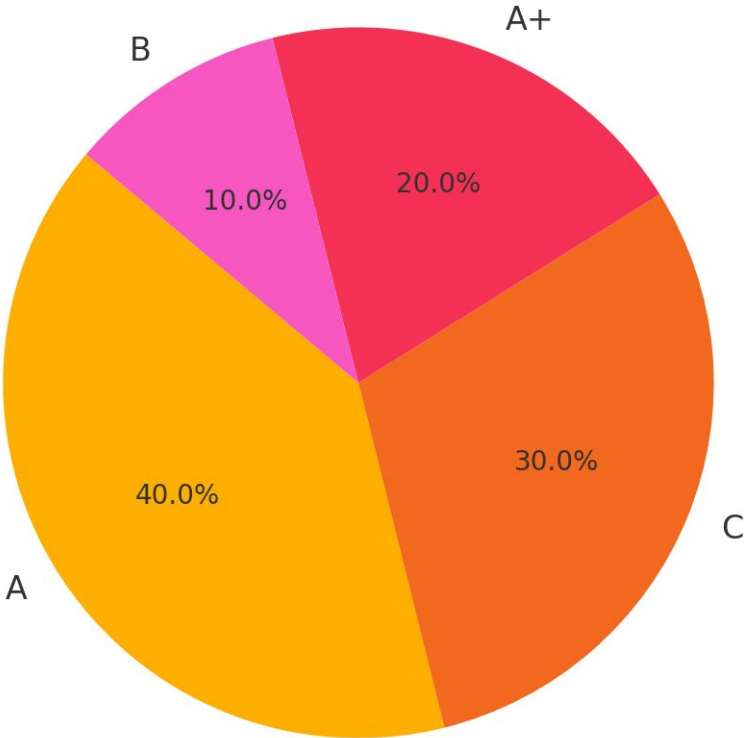
# Step 4: Assign Grades
def get_grade(pct): ...
df['Grade'] = df['Percentage'].apply(get_grade)

# Step 5: Bar Chart - Total Marks
plt.bar(df['Name'], df['Total'])
plt.savefig('total_marks_bar.png')

# Step 6: Pie Chart - Grade Distribution
plt.pie(...)
plt.savefig('grade_distribution_pie.png')
```

*Note: Charts are saved as images and submitted along with this report.*

Grade Distribution



Total Marks of Students

