

# Python Code: Student Performance Analysis

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

# Sample data
data = {
    'Student_ID': [1, 2, 3, 4, 5],
    'Name': ['Alice', 'Bob', 'Charlie', 'David', 'Eva'],
    'Math': [85, 90, 78, 92, 88],
    'Science': [90, 85, 92, 88, 76],
    'Attendance': [95, 90, 85, 92, 88]
}

# Create DataFrame
df = pd.DataFrame(data)

# Display the data
print("Student Performance Data:")
print(df)

# Calculate average marks in Math and Science
df['Average'] = (df['Math'] + df['Science']) / 2

# Display average marks
print("\nStudent Performance with Average Marks:")
print(df)

# Visualize data
plt.figure(figsize=(10, 6))
plt.scatter(df['Attendance'], df['Average'])
plt.title('Attendance vs Average Marks')
plt.xlabel('Attendance (%)')
plt.ylabel('Average Marks')
plt.grid(True)
plt.show()

# Identify students with low attendance (<90%)
low_attendance_students = df[df['Attendance'] < 90]
print("\nStudents with Low Attendance:")
print(low_attendance_students)
```