**About Dataset**

This dataset contains comprehensive information on 2,392 high school students, detailing their demographics, study habits, parental involvement, extracurricular activities, and academic performance. The target variable, GradeClass, classifies students' grades into distinct categories, providing a robust dataset for educational research, predictive modeling, and statistical analysis.

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**Student Information**

**Student ID**

* **StudentID**: A unique identifier assigned to each student (1001 to 3392).

**Demographic Details**

* **Age**: The age of the students ranges from 15 to 18 years.
* **Gender**: Gender of the students, where 0 represents Male and 1 represents Female.
* **Ethnicity**: The ethnicity of the students, coded as follows:
* 0: Caucasian
* 1: African American
* 2: Asian
* 3: Other
* **ParentalEducation**: The education level of the parents, coded as follows:
* 0: None
* 1: High School
* 2: Some College
* 3: Bachelor's
* 4: Higher

**Study Habits**

* **StudyTimeWeekly**: Weekly study time in hours, ranging from 0 to 20.
* **Absences**: Number of absences during the school year, ranging from 0 to 30.
* **Tutoring**: Tutoring status, where 0 indicates No and 1 indicates Yes.

**Parental Involvement**

* **ParentalSupport**: The level of parental support, coded as follows:
* 0: None
* 1: Low
* 2: Moderate
* 3: High
* 4: Very High

**Extracurricular Activities**

* **Extracurricular**: Participation in extracurricular activities, where 0 indicates No and 1 indicates Yes.
* **Sports**: Participation in sports, where 0 indicates No and 1 indicates Yes.
* **Music**: Participation in music activities, where 0 indicates No and 1 indicates Yes.
* **Volunteering**: Participation in volunteering, where 0 indicates No and 1 indicates Yes.

**Academic Performance**

* **GPA**: Grade Point Average on a scale from 2.0 to 4.0, influenced by study habits, parental involvement, and extracurricular activities.

**Target Variable: Grade Class**

* **GradeClass**: Classification of students' grades based on GPA:
* 0: 'A' (GPA >= 3.5)
* 1: 'B' (3.0 <= GPA < 3.5)
* 2: 'C' (2.5 <= GPA < 3.0)
* 3: 'D' (2.0 <= GPA < 2.5)
* 4: 'F' (GPA < 2.0)

**Conclusion**

This dataset offers a comprehensive view of the factors influencing students' academic performance, making it ideal for educational research, development of predictive models, and statistical analysis.