

Variables Table

Variable Name	Role	Type	Demographic	Description	Units	Missing Values
school	Feature	Categorical		student's school (binary: 'GP' - Gabriel Pereira or 'MS' - Mousinho da Silveira)		no
sex	Feature	Binary	Sex	student's sex (binary: 'F' - female or 'M' - male)		no
age	Feature	Integer	Age	student's age (numeric: from 15 to 22)		no
address	Feature	Categorical		student's home address type (binary: 'U' - urban or 'R' - rural)		no
famsize	Feature	Categorical	Other	family size (binary: 'LE3' - less or equal to 3 or 'GT3' - greater than 3)		no
Pstatus	Feature	Categorical	Other	parent's cohabitation status (binary: 'T' - living together or 'A' - apart)		no
Medu	Feature	Integer	Education Level	mother's education (numeric: 0 - none, 1 - primary education (4th grade), 2 - 5th to 9th grade, 3 - secondary education or 4 - higher education)		no
Fedu	Feature	Integer	Education Level	father's education (numeric: 0 - none, 1 - primary education (4th grade), 2 - 5th to 9th grade, 3 - secondary education or 4 - higher education)		no
Mjob	Feature	Categorical	Occupation	mother's job (nominal: 'teacher', 'health' care related, civil 'services' (e.g. administrative or police), 'at_home' or 'other')		no
Fjob	Feature	Categorical	Occupation	father's job (nominal: 'teacher', 'health' care related, civil 'services' (e.g. administrative or police), 'at_home' or 'other')		no
reason	Feature	Categorical		reason to choose this school (nominal: close to 'home', school 'reputation', 'course' preference or 'other')		no
guardian	Feature	Categorical		student's guardian (nominal: 'mother', 'father' or 'other')		no
traveltime	Feature	Integer		home to school travel time (numeric: 1 - <15 min., 2 - 15 to 30 min., 3 - 30 min. to 1 hour, or 4 - >1 hour)		no
studytime	Feature	Integer		weekly study time (numeric: 1 - <2 hours, 2 - 2 to 5 hours, 3 - 5 to 10 hours, or 4 - >10 hours)		no

Variable Name	Role	Type	Demographic	Description	Units	Missing Values
failures	Feature	Integer		number of past class failures (numeric: n if $1 \leq n < 3$, else 4)		no
schoolsup	Feature	Binary		extra educational support (binary: yes or no)		no
famsup	Feature	Binary		family educational support (binary: yes or no)		no
paid	Feature	Binary		extra paid classes within the course subject (Math or Portuguese) (binary: yes or no)		no
activities	Feature	Binary		extra-curricular activities (binary: yes or no)		no
nursery	Feature	Binary		attended nursery school (binary: yes or no)		no
higher	Feature	Binary		wants to take higher education (binary: yes or no)		no
internet	Feature	Binary		Internet access at home (binary: yes or no)		no
romantic	Feature	Binary		with a romantic relationship (binary: yes or no)		no
famrel	Feature	Integer		quality of family relationships (numeric: from 1 - very bad to 5 - excellent)		no
freetime	Feature	Integer		free time after school (numeric: from 1 - very low to 5 - very high)		no
goout	Feature	Integer		going out with friends (numeric: from 1 - very low to 5 - very high)		no
Dalc	Feature	Integer		workday alcohol consumption (numeric: from 1 - very low to 5 - very high)		no
Walc	Feature	Integer		weekend alcohol consumption (numeric: from 1 - very low to 5 - very high)		no
health	Feature	Integer		current health status (numeric: from 1 - very bad to 5 - very good)		no
absences	Feature	Integer		number of school absences (numeric: from 0 to 93)		no
G1	Target	Categorical		first period grade (numeric: from 0 to 20)		no
G2	Target	Categorical		second period grade (numeric: from 0 to 20)		no
G3	Target	Integer		final grade (numeric: from 0 to 20, output target)		no