

Task:4: Find correlation between variable or features of dataset

Correlation is the statistical analysis of the relationship or dependency between two variables. The value of the correlation coefficient ranges from [-1 – 1]. -1 is indicate for a negative relationship. 1 means a positive relationship. 0 means no relationship.

```
df1.corr()
```

1 to 14 of 14 entries

Filter

?

index	math score	reading score	writing score	gender_female	gender_male
math score	1.0	0.8175796636720539	0.8026420459498075	-0.16798223810035554	0.1679822381003556
reading score	0.8175796636720539	1.0	0.9545980771462476	0.24431260787747214	-0.244312607877472
writing score	0.8026420459498075	0.9545980771462476	1.0	0.3012249355007125	-0.301224935500712
gender_female	-0.16798223810035554	0.24431260787747214	0.3012249355007125	1.0	-1
gender_male	0.16798223810035562	-0.2443126078774721	-0.3012249355007124	-1.0	1
race/ethnicity_group A	-0.09197709990214416	-0.09627399708853383	-0.1107141590828926	-0.07100105033332774	0.071001050333327
race/ethnicity_group B	-0.0842500599939814	-0.06028328699250656	-0.07825401387470718	0.028466002950231606	-0.028466002950231
race/ethnicity_group C	-0.07338687290137147	-0.003074429900846504	-0.010202872032836078	0.06336803053173949	-0.0633680305317394
race/ethnicity_group D	0.05007071350889439	0.03517659137232686	0.08203179191373305	-0.030566341568953142	0.03056634156895314
race/ethnicity_group E	0.20585458094675596	0.10671182951929879	0.08907680313022094	-0.020302102730990156	0.0203021027309901
lunch_free/reduced	-0.35087664559186116	-0.2295603216622809	-0.245768676384218	0.021371670377777457	-0.02137167037777747
lunch_standard	0.350876645591861	0.2295603216622811	0.24576867638421812	-0.021371670377777437	0.0213716703777774
test preparation course_completed	0.17770246930439496	0.24178043354875156	0.3129462844859569	-0.006027951742860106	0.00602795174286005
test preparation course_none	-0.17770246930439512	-0.24178043354875142	-0.3129462844859568	0.006027951742859992	-0.00602795174286001

Show 25 per page

Like what you see? Visit the [data table notebook](#) to learn more about interactive tables.