In the following table the grades of 20 students in four modules along with their sex and year of study are listed.

1. Create, using the table, 6 vectors (one vector for each column).
2. Calculate the mean value of each module by sex.
3. Calculate the maximum grade for each module separately.
4. Calculate the maximum grade in any course.
5. Calculate the mean grade of each student and its classification among all students but also among the students from the same year.
6. Who is the best student? Standardize the grades so that they are comparable and calculate the mean with the use of standardized grades.
7. Calculate the percentage of students passed all the modules.
8. Calculate the mean and the variance for those that passed all the modules.
9. From the data create a matrix. Re-calculate 3-6 and 8 using this matrix.
10. For each module calculate the ratio of the standard deviation with the mean. What does the ratio show?

id	Chemistry	Physics	Mathematics	Literature	Sex	Year of study
1	93	42	98	34	Male	1
2	71	67	68	33	Male	1
3	77	59	36	24	Male	1
4	78	70	92	24	Male	1
5	77	59	44	31	Male	1
6	81	50	45	22	Male	2
7	88	50	58	23	Female	2
8	74	51	31	32	Female	2
9	67	45	70	31	Female	2
10	78	64	46	26	Female	2
11	77	49	41	75	Male	1
12	67	49	46	81	Male	1
13	63	48	65	87	Female	1
14	83	51	62	100	Female	1
15	73	56	20	81	Female	1
16	70	47	22	100	Female	2
17	78	53	92	77	Male	2
18	95	56	56	89	Male	2
19	88	49	28	100	Male	2
20	75	71	94	77	Male	2