Module 2: Data Connection With Tableau Desktop

Demo Document I

edureka!

Demo I

Suppose, you are given Student Personal Information and Students Academic Information and you are asked to create a tableau report on showing Students performance in math, reading and writing test based on Gender.

Demo I – Solution

Joins in Tableau

Tableau Joins play a very vital role in designing reports. **Joins** are used to link different datasets from different sources, provided both have one common field.

We are given a data source which has data sheets:

a) Student Personal Information

Student ID	Gender	Race/Ethnicity	Parental level of education	Lunch
1	female	group B	bachelor's degree	standard
2	female	group C	some college	standard
3	female	group B	master's degree	standard
4	male	group A	associate's degree	free/reduced
5	male	group C	some college	standard
6	female	group B	associate's degree	standard
7	female	group B	some college	standard
8	male	group B	some college	free/reduced
9	male	group D	high school	free/reduced
10	female	group B	high school	free/reduced
11	male	group C	associate's degree	standard
12	male	group D	associate's degree	standard
13	female	group B	high school	standard
14	male	group A	some college	standard
15	female	group A	master's degree	standard
16	female	group C	some high school	standard
17	male	group C	high school	standard
18	female	group B	some high school	free/reduced
19	male	group C	master's degree	free/reduced

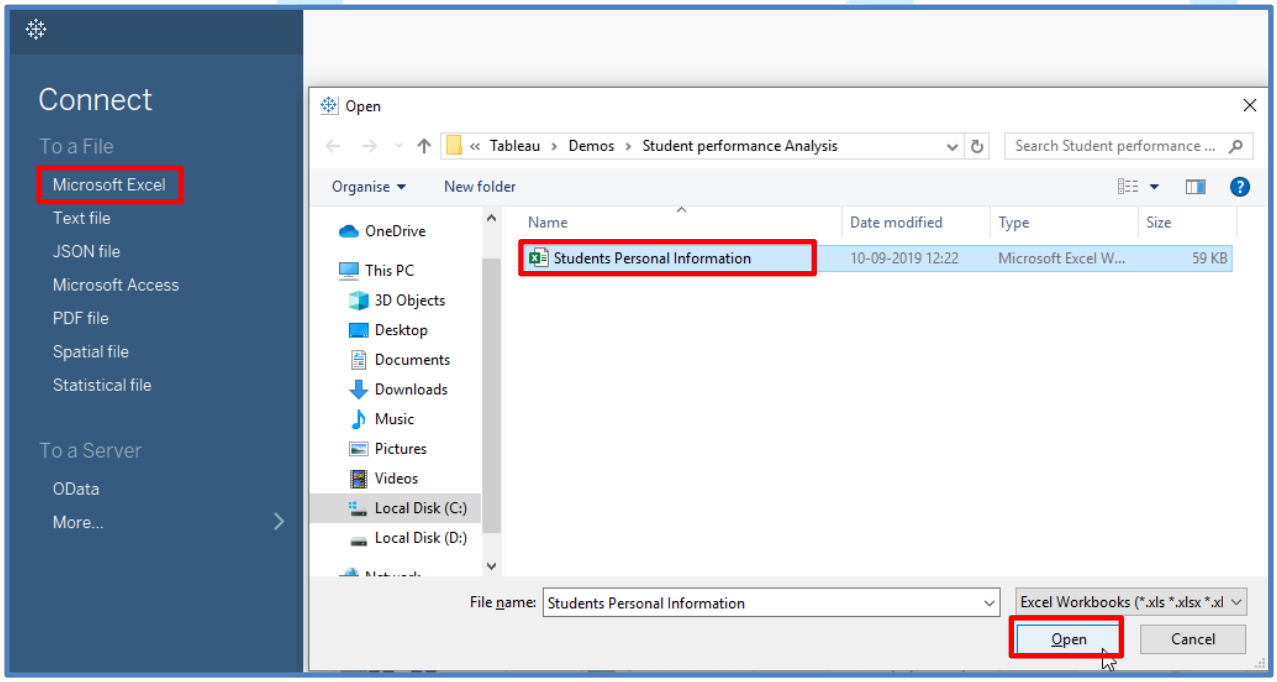
b) Student Academic Information

	Student ID	Test preparation course	Math score	Reading score	Writing score
2	1	none	72	72	74
3	2	completed	69	90	88
4	3	none	90	95	93
5	4	none	47	57	44
6	5	none	76	78	75
7	6	none	71	83	78
8	7	completed	88	95	92
9	8	none	40	43	39
10	9	completed	64	64	67
11	10	none	38	60	50
12	11	none	58	54	52
13	12	none	40	52	43
14	13	none	65	81	73
15	14	completed	78	72	70
16	15	none	50	53	58
17	16	none	69	75	78
18	17	none	88	89	86
19	18	none	18	32	28
20	19	completed	46	42	46

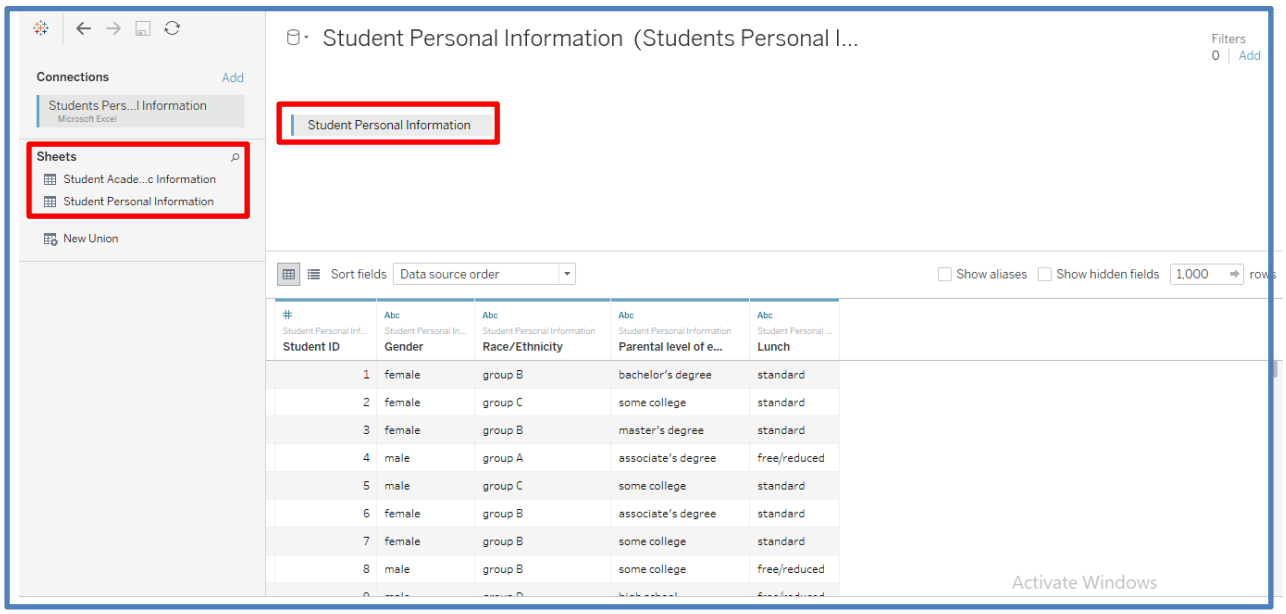
Now given the datasets, we need to create a Tableau report to visualize the performance of students in the tests based on gender.

Step 1: Click on Excel

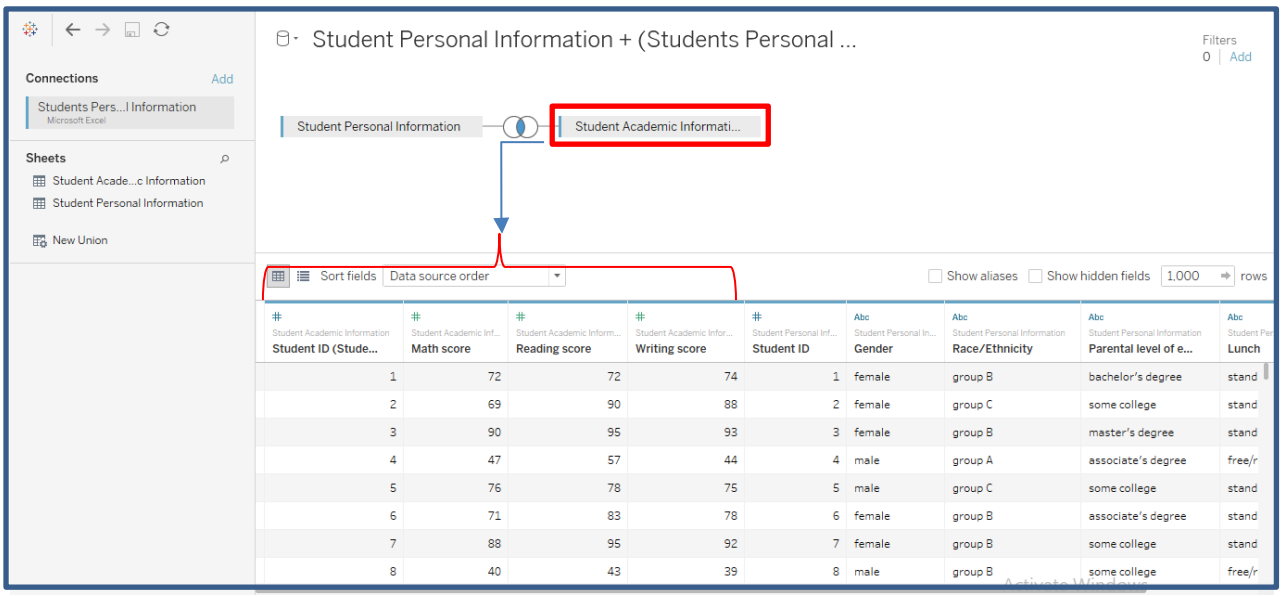
Step 2: Select "Student Performance Information" and click on Open



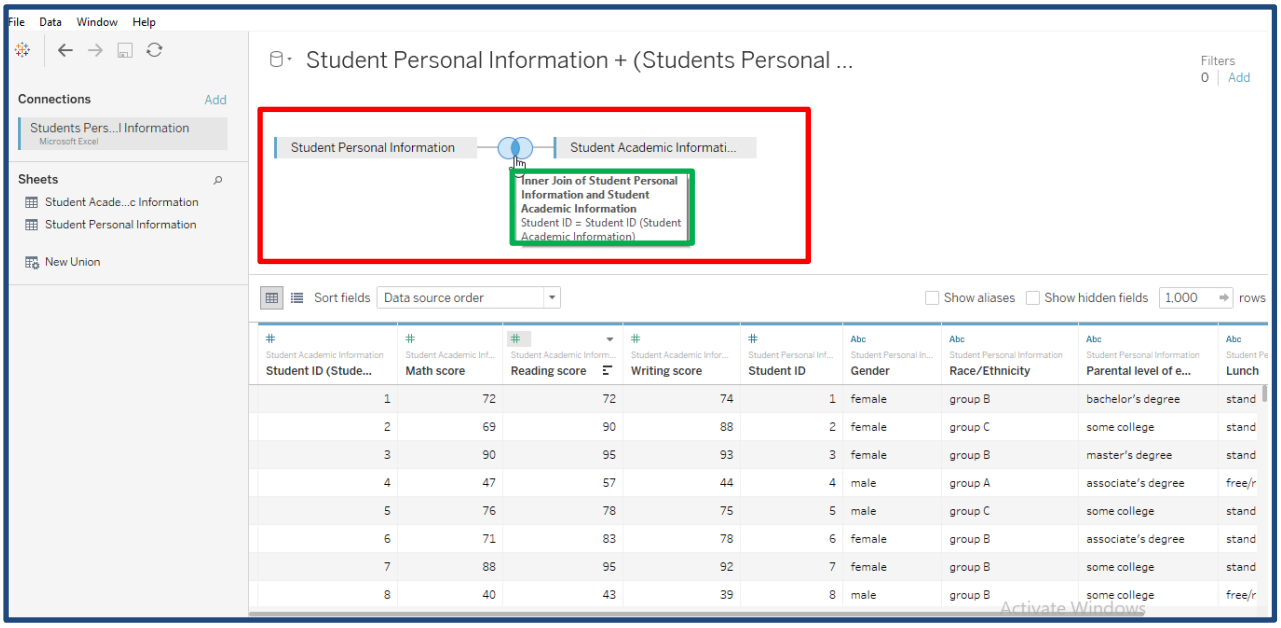
Step 3: Drag the "Student Personal Information" sheet and drop it in the flow pane.



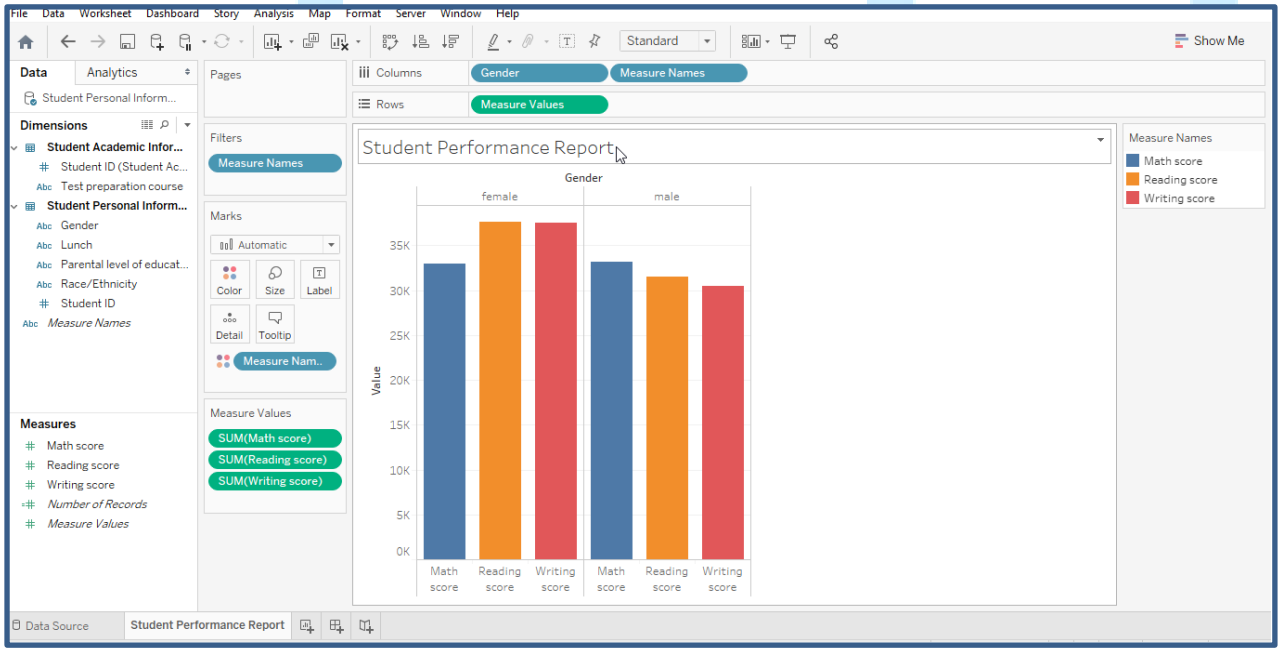
Step 4: Drag "Student Academic Information" and drop it in the flow pane.



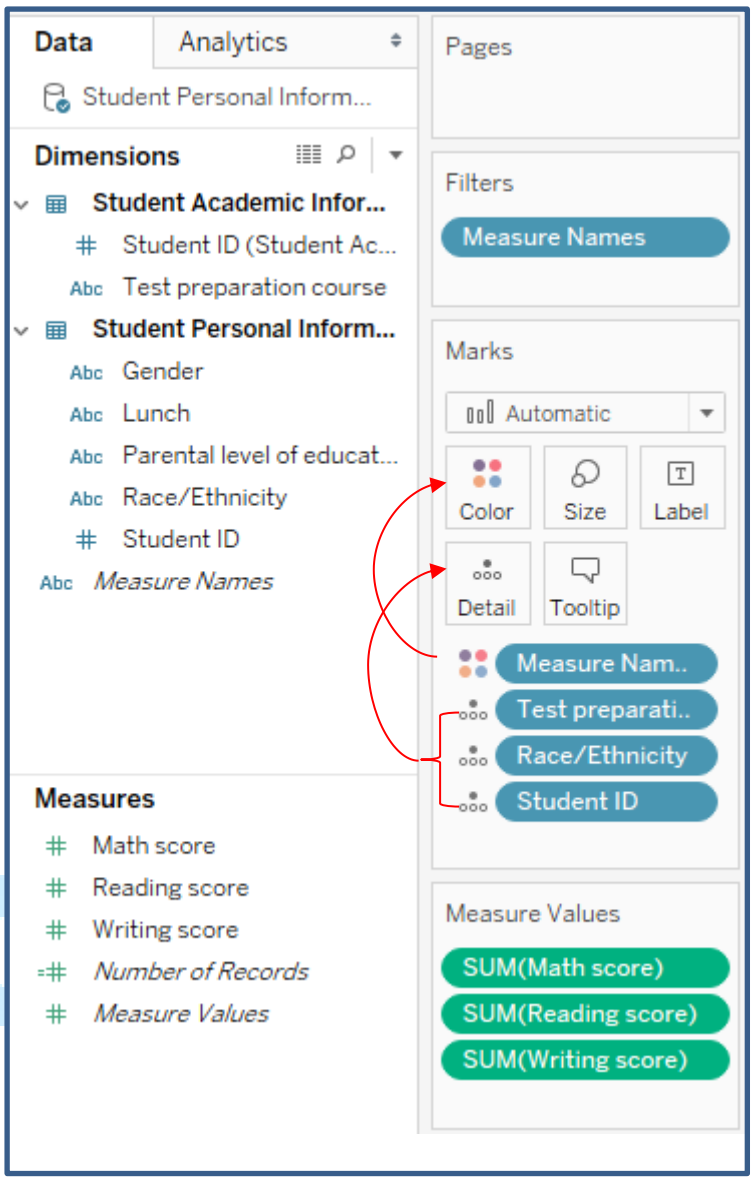
Step 5: Combine both the data sources using inner join, and click on Sheet 1.



Step 6: Drag "Gender" from Dimensions to the column shelf and "Math score", "Reading score" and "Writing score" from Measures to row shelf. Lastly, add "Measure Values" to Color shelf (Marks Card).

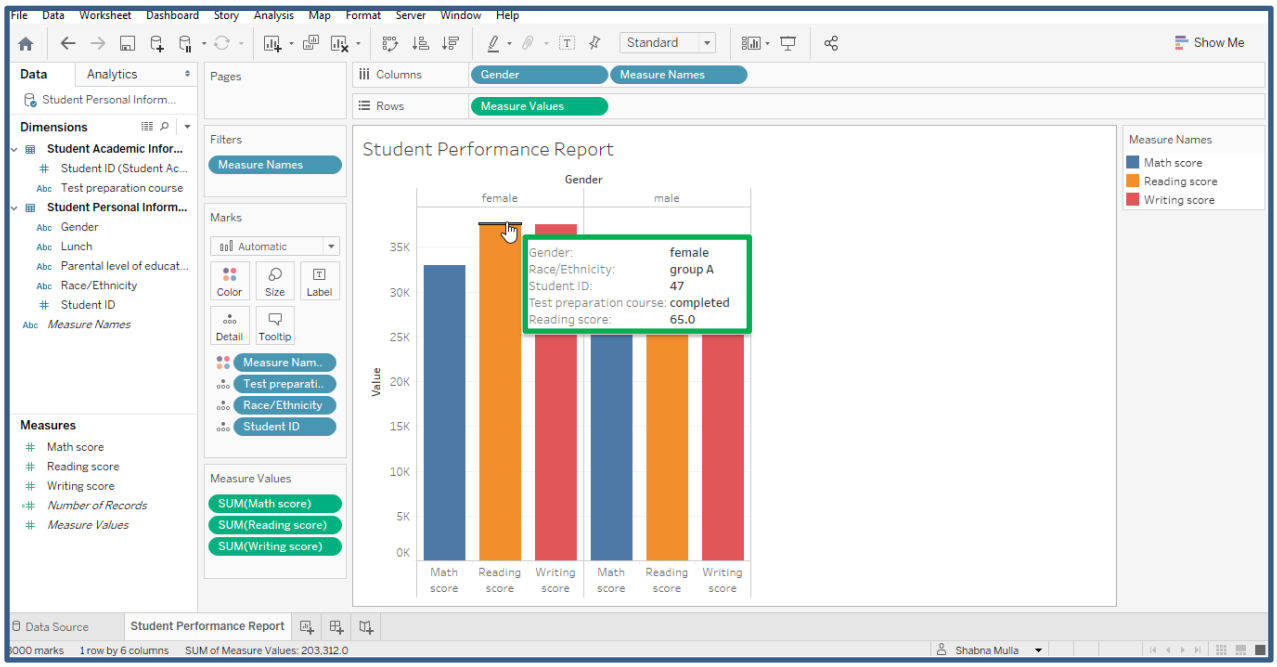


Step 7: Drag "Race/Ethnicity", "Test Preparation Course" and "Student ID" to **Detail Shelf** and "Measure Names" to **Color shelf**



Step 8: Create a bar chart by dragging

- Gender and Measure Names (Maths, Reading and Writing score) in column shelf
- Measure values(Maths, Reading and Writing score) in row shelf
- Test Preparation Course, Race and Student ID to Details Shelf (Marks card)



The chart shows the scoring of students in different tests based on Gender.