

## Power BI Assignment

**1. Using the dataset given below create the One-to-Many Relationship**

**a) Students [StudentID] → Enrollments [StudentID] (1:M)**

**b) Courses [CourseID] → Enrollments [CourseID] (1:M)**

The screenshot shows the Power BI Desktop interface with the 'Edit relationship' dialog box open. The dialog box allows users to define relationships between tables based on shared columns. In this case, a relationship is being established between the 'Students' table and the 'Enrollments' table. The 'Students' table contains three rows of data:

StudentID	FullName	Gender	Department	EnrollmentYear
S001	Aisha Khan	F	CS	2021
S002	Ravi Mehra	M	IT	2022
S003	Sneha Joshi	F	CS	2023

The 'Enrollments' table contains two rows of data:

Column1	Column2	Column3	Column4
EnrollmentID	StudentID	CourseID	Grade
E001	S001	C101	A
E002	S001	C102	B

The relationship is defined with a cardinality of "One to many (1:\*)" and a cross-filter direction of "Single". There are checkboxes for "Make this relationship active" and "Assume referential integrity", both of which are checked. The "OK" button is highlighted, indicating the user is about to save the relationship.

**Edit relationship**

Select tables and columns that are related.

**Courses**

CourseID	CourseName	Department	Credits
C101	Data Structures	CS	4
C102	Operating Systems	CS	4
C201	Database Systems	IT	3

**Enrollments**

Column1	Column2	Column3	Column4
EnrollmentID	StudentID	CourseID	Grade
E001	S001	C101	A
E002	S001	C102	B

**Cardinality**: One to many (1:\*)    **Cross filter direction**: Single

Make this relationship active     Apply security filter in both directions     Assume referential integrity

**OK**    **Cancel**

**Courses**

CourseID	CourseName	Credits	Department
C101	Data Structures	4	CS
C102	Operating Systems	4	CS
C201	Database Systems	3	IT

**Students**

StudentID	Gender	FullName	EnrollmentYear	Department
S001	M	John Doe	2023	CS
S002	F	Jane Smith	2023	CS
S003	M	Mike Johnson	2023	IT

**Enrollments**

EnrollmentID	StudentID	CourseID	Grade
E001	S001	C101	A
E002	S001	C102	B