

## Structure for storing tables partition key and sort key in single table

Table Name	Partition Key	Sort Key
Organization	ORG#org_id	#METADATA# org_id
Project	ORG# org_id	PRO#project-type#project_id
Employee	ORG#org_id	EMP#employee_id

## Defining Relationship

- Here One Organization can have multiple projects, which is already defined. So, one to many relationships is defined.
- Each employee is positioned under one organization that means one to many relationships is defined.
- We need to define many to many relationships between project and employee table. So, the partition key and sort key could be

Table Name	Partition Key	Sort Key
Organization	ORG#org_id#PRO#project_id	ORG#org_id#EMP#employee_id

To get the project an employee is part of we need to define an inverted index as GSI

Index Name: Project Employee Index

Table Name	Partition Key	Sort Key
Organization	ORG#org_id#EMP#employee_id	ORG#org_id#PRO#project_id

For filtering organization, project, employee name we need to define another GSI which is called as GSI Overloading

Index Name: Filter by name

Table Name	Partition Key	Sort Key
Organization	ORG#org_id	Data #org_name Or, Data #project_name Or, Data#employee_name