**Relations in ERD**

Branch(Branch\_id, phone#, address)

Employee (Emp\_id, branch\_id,date\_left,date\_join, designation,emp\_sal, l\_name ,f\_name)

Customer( Cus\_id ,branch\_id, menu\_id,cus\_address, f\_name,l\_name)

Expense((Expense\_id,Branch\_id, utiliy\_bills,emp\_salary)

Delivery(Del\_id,Branch\_id,Phone#,Address)

Stock(Item\_idBranch\_id,total\_stock,Expire\_date,manufacture\_date,quantity)

Purchase(purchase\_id,Branch\_id,Type,quantity,date,price,Description)

Suppliers(Supplier\_id,Branch\_id,end\_date,date\_start,phone#,f\_name,l\_name)

Transport(Transport\_id,date,address )

Menu(Menu\_id, last\_used,rating)

Sale(sale\_id,Branch\_id.total , date)

Recipe(Recipe\_id,emp\_id, branch\_id,Menu\_id,Type,name)

**UML with Relations**

**Relations in UML**

Branch(Branch\_id, phone#, address)

Employee (Emp\_id, branch\_id,date\_left,date\_join, designation,emp\_sal, l\_name ,f\_name)

Customer( Cus\_id ,branch\_id, menu\_id,cus\_address, f\_name,l\_name)

Expense((Expense\_id,Branch\_id, utiliy\_bills,emp\_salary)

Delivery(Del\_id,Branch\_id,Phone#,Address)

Stock(Item\_idBranch\_id,total\_stock,Expire\_date,manufacture\_date,quantity)

Purchase(purchase\_id,Branch\_id,Type,quantity,date,price,Description)

Suppliers(Supplier\_id,Branch\_id,end\_date,date\_start,phone#,f\_name,l\_name)

Transport(Transport\_id,date,address )

Menu(Menu\_id, last\_used,rating)

Sale(sale\_id,Branch\_id.total , date)

Recipe(Recipe\_id,emp\_id, branch\_id,Menu\_id,Type,name)

**ERD with Normalized form**

**And Relations**

Branch(Branch\_id, phone#, address)

Employee (Emp\_id, branch\_id,date\_left,date\_join, designation,emp\_sal, l\_name ,f\_name)

Customer\_Bio( Cus\_id ,branch\_id, menu\_id,cus\_address, f\_name,l\_name)

Customer\_address( Cus\_id,branch\_id, menu\_id,cus\_address)

Expense((Expense\_id,Branch\_id, utiliy\_bills,emp\_salary)

Delivery(Del\_id,Branch\_id,Phone#,Address)

Stock(Item\_idBranch\_id,total\_stock,Expire\_date,manufacture\_date,quantity)

Purchase(purchase\_id,Branch\_id,Type,quantity,date,price,Description)

Supplier\_Bio(Supplier\_id,Branch\_id,end\_date,date\_start,phone#,f\_name,l\_name)

Supplier\_address(Supplier\_id,Branch\_id,phone#)

Transport(Transport\_id,date,address )

Menu(Menu\_id, last\_used,rating)

Sale(sale\_id,Branch\_id.total , date)

Recipe\_name(Recipe\_id,emp\_id, branch\_id,Menu\_id ,name)

Recipe\_type(Recipe\_id,emp\_id, branch\_id,Menu\_id ,type)