**Ali Ahmed Fathi**

**Open-Source Track**

**DB Lab 4**



0 normal form [Customer\_No, CName, Property\_No, PAddress, RentStart, RentFinish, Rent, Owner\_No, OName]

**1 normal form {Multi values attributes - Composite attributes - Repeating Groups (Multi Values + related attributes ) }**

Customer [Customer\_No, CName]

Customer\_Property [#Property\_No, #Customer\_No, PAddress, RentStart, RentFinish, Rent, Owner\_No, OName]

**2 normal form { Partial dependency = attribute depend Partially on composite attribute }**

Customer [Customer\_No, CName]

Customer\_Property [#Property\_No, #Customer\_No, RentStart, RentFinish, Rent]

property [#property\_No, PAdress , Owner\_No, OName]

**3 normal form { Transitive [ Fake dependency ] :> Attribute depend on a NON Key Attribute }**

Customer [Customer\_No, CName]

Customer\_Property [#Property\_No, #Customer\_No, #Property\_No, Rent, RentStart, RentFinish]

Property [#property\_No, Owner\_No ,PAdress]

Property\_Owner [#Owner\_No, OName]

1. **0 normal form**

Project[Proj\_num,Proj\_name,Emp\_num,Emp\_name,job\_class,Chg\_Hour,Hours\_Billed,Total\_Charge]

**1 normal form {Multi values attributes - Composite attributes - Repeating Groups (Multi Values + related attributes ) }**

Project [Proj\_num,Proj\_name]

Empolyee[#Proj\_num,#Emp\_num,Emp\_name,job\_class,Chg\_Hour,Hours\_Billed]

**2 normal form { Partial dependency = attribute depend Partially on composite attribute }**

Project [Proj\_num,Proj\_name]

Project\_Empolyee[#Proj\_num,#Emp\_num, Hours\_Billed]

Employee [Emp\_num, Emp\_name, job\_class, Chg\_Hour]

**3 normal form { Transitive [ Fake dependency ] :> Attribute depend on a NON Key Attribute }**

Project [Proj\_num,Proj\_name]

Project\_Empolyee[#Proj\_num,#Emp\_num, Hours\_Billed]

Employee [Emp\_num, Emp\_name, #job\_class]

Emp\_Charge [Job\_class,Chg\_Hour]