**COMP 2721**

**Assignment 4 – Normalization: Relational Model**

**Kung, Camillus A00785290 Set D**

**Lee, Hansol A00966991 Set D**

**Q1.**

**UNF:**

OrdForm (OrdNo, OrdName, OrdStreet, OrdState, OrdDate, OrdCity, OrdZip, EmpNo,

EmpFirstName, EmpLastName, CustNo, CustFirstName, CustLastName,

CustStreet, CustCity, CustState, CustZip, [ProdNo, Product, SuppNo, Supplier,

Qty, Price, Amount]…)

**1NF (resolve repeating groups):**

OrdForm (OrdNo, OrdName, OrdStreet, OrdState, OrdDate, OrdCity, OrdZip, EmpNo,

EmpFirstName, EmpLastName, CustNo, CustFirstName, CustLastName,

CustStreet, CustCity, CustState, CustZip, TotalAmt)

OrderDet (OrdNo[FK], ProdNo, Product, SuppNo, Supplier, Qty, Price, Amt)

**2NF (resolve partial dependency):**

OrdForm (OrdNo, OrdName, OrdStreet, OrdState, OrdDate, OrdCity, OrdZip, EmpNo,

EmpFirstName, EmpLastName, CustNo, CustFirstName, CustLastName,

CustStreet, CustCity, CustState, CustZip, TotalAmt)

OrderDet (OrdNo[FK], ProdNo[FK], Qty, Amt)

Product (ProdNo, Product, SuppNo, Supplier, Price)

**3NF (resolve transitive dependency):**

OrdForm (OrdNo, OrdName, OrdStreet, OrdState, OrdDate, OrdCity, OrdZip, EmpNo[FK],

CustNo[FK], TotalAmt)

Employee (EmpNo, EmpFirstName, EmpLastName)

Customer (CustNo, CustFirstName, CustLastName, CustStreet, CustCity, CustState,

CustZip)

OrderDet (OrdNo[FK], ProdNo[FK], Qty, Amt)

Product (ProdNo, Product, Price, SuppNo[FK])

Supply (SuppNo, Supplier)



**Q2.**

**UNF:**

Invoice (InvNo, OrdNo, InvDate, CustNo, CustName, CustAddr, TotalAmt, Discount,

AmtDue, [ProdNo, ProdDesc, QtyOrd, QtyShip, QtyBack, UnitPrice,

TotalPrice]…)

**1NF (resolve repeating groups):**

Invoice (InvNo, OrdNo, InvDate, CustNo, CustName, CustAddr, TotalAmt, Discount,

AmtDue)

InvoiceDet (InvNo[FK], ProdNo, ProdDesc, QtyOrd, QtyShip, QtyBack, UnitPrice,

TotalPrice)

**2NF (resolve partial dependency):**

Invoice (InvNo, OrdNo, InvDate, CustNo, CustName, CustAddr, TotalAmt, Discount,

AmtDue)

InvoiceDet (InvNo[FK], ProdNo[FK], QtyOrd, QtyShip, QtyBack, TotalPrice)

Product (ProdNo, ProdDesc, UnitPrice)

**3NF (resolve transitive dependency):**

Invoice (InvNo, OrdNo, InvDate, CustNo[FK], TotalAmt, Discount, AmtDue)

Customer (CustNo, CustName, CustAddr)

InvoiceDet (InvNo[FK], ProdNo[FK], QtyOrd, QtyShip, QtyBack, TotalPrice)

Product (ProdNo, ProdDesc, UnitPrice)

