

# FD's and Normal Form Proofs

## 1)-Country

Country\_abbrev -> Country\_name

Candidate key- Country\_abbrev.

Normal form - BCNF

## 2)-Olympic

{year,season} -> start\_date

{year,season} -> end\_date

{year,season} -> city

{year,season} -> country\_abbrev

**Candidate Key- {year,season}**

Normal form - BCNF

### **3)-Sport**

Sport\_id -> sport\_name

**Candidate key-** Sport\_id

Normal form - BCNF

### **4)-Discipline**

{Discipline\_name,kind,type} - > sport\_id

**Candidate key-** {Discipline\_name,kind,type}

Normal form - BCNF

## 5)-Athlete

athlete\_id -> gender

athlete\_id -> fname

athlete\_id -> lname

athlete\_id -> country\_abbrev

athlete\_id -> sport\_id

**Candidate key-** athlete\_id

**Normal form –BCNF**

## 6)-Result

{Athlete\_id,year,season,discipline\_name,kind,type}->  
medal\_type

**Candidate key-**

{Athlete\_id,year,season,discipline\_name,kind,type}

**Normal form -BCNF**

### **7)- Participated\_In**

All the attributes are candidate keys.

**Normal form-BCNF**

### **8)- Consist\_of**

All the attributes are candidate keys.

**Normal form-BCNF**