NORMALIZATION

Chairman …..1…appoints…..1….ceo.

UNF:-

* Appoints(ch-address, ch-name, ce-name,ce-id,ce-address, ce-phone, ce-salary, ch-id, ch-phone)

1NF:-

Ce-phone and ch-phone are multivalued attribute.

* (ch-address, ch-name, ce-name,ce-id,ce-address, ce-phone, ce-salary, ch-id, ch-phone)

2NF:-

* (ch-address, ch-name, ch-id,ch-phone)
* (ce-name,ce-id,ce-address, ce-phone, ce-salary)

3NF:-

* No transitive dependency found.
* (ch-address, ch-name, ch-id,ch-phone)
* (ce-name,ce-id,ce-address, ce-phone, ce-salary)

Table Creation:-

* ch-address, ch-name, ch-id,ch-phone
* ce-name,ce-id,ce-address, ce-phone, ce-salary,**ch-id**.

Ceo…….1…….Arrange……\*……Matches

UNF:-

* Arrange (ce-name,ce-id,ce-address, ce-phone, ce-salary,m-fee,m-schedule,m-vanue,match-no)

1NF:-

Ce-phone is multivalued attribute.

* (ce-name,ce-id,ce-address, ce-phone, ce-salary,m-fee,m-schedule,m-vanue,match-no)

2NF:-

* (ce-name,ce-id,ce-address, ce-phone, ce-salary)
* (m-fee,m-schedule,m-vanue,match-no)

3NF:-

* No transitive dependency found.
* (ce-name,ce-id,ce-address, ce-phone, ce-salary)
* (m-fee,m-schedule,m-vanue,match-no)

Table creation:-

* (ce-name,ce-id,ce-address, ce-phone, ce-salary,**match-no**.
* (m-fee,m-schedule,m-vanue,match-no)

Ceo…..1…….leads…..1…..club

UNF:-

* Leads(ce-name,ce-id,ce-address, ce-phone, ce-salary,cl-name,cl-address,cl-registranion no ,cl-phone)

1NF:-

Ce-phone and cl-phone are multivalued attribute.

* (ce-name,ce-id,ce-address, ce-phone, ce-salary,m-fee,m-schedule,m-vanue,match-no)

2NF:-

* (ce-name,ce-id,ce-address, ce-phone, ce-salary)
* (cl-name,cl-address,cl-registranion no ,cl-phone)

3NF:-

* No transitive dependency found.
* (ce-name,ce-id,ce-address, ce-phone, ce-salary)
* (cl-name,cl-address,cl-registranion no ,cl-phone)

Table creation:-

* ce-name,ce-id,ce-address, ce-phone, ce-salary
* cl-name,cl-address,cl-registranion no ,cl-phone,**ce-id**.

Club…….1…..Has…..1…..Manager

UNF:-

* Has(cl-name,cl-address,cl-registranion no ,cl-phone,m-id ,m-name,m-phone,m-address,m-salary)

1NF:-

cl-phone and m-phone are multivalued attribute.

* (cl-name,cl-address,cl-registranion no ,cl-phone,m-id ,m-name,m-

phone,m-address,m-salary)

2NF:-

* (cl-name,cl-address,cl-registranion no ,cl-phone
* (m-id ,m-name,m-phone,m-address,m-salary)

3NF:-

* No transitive dependency found.
* (cl-name,cl-address,cl-registranion no ,cl-phone,
* (m-id ,m-name,m- phone,m-address,m-salary)

Table creation:-

* cl-name,cl-address,cl-registranion no ,cl-phone,
* m-id ,m-name,m- phone,m-address,m-salary,**cl-registration**.

Club…….1…..has…\*…coach

UNF:-

* has(cl-name,cl-address,cl-registranion no ,cl-phone,co-id ,co-name,co-address,co-phone,co-salary)

1NF:-

Cl-phone and co-phone are multivalued attribute.

* cl-name,cl-address,cl-registranion no ,cl-phone,co-id ,co-name,co-address,co-phone,co-salary)

2NF:-

* (cl-name,cl-address,cl-registranion no ,cl-phone)
* (co-id ,co-name,co-address,co-phone,co-salary)

3NF:-

* No transitive dependency found.
* (cl-name,cl-address,cl-registranion no ,cl-phone)
* (co-id ,co-name,co-address,co-phone,co-salary)

Table Creation:-

* cl-name,cl-address,cl-registranion no ,cl-phone,co-id
* co-id,co-name,co-address,co-phone,**co-salary**

Manager ……1……Manage…..\*…Unique Team

UNF:-

Manage (M-id,m-name,m-address,m-salary,m-phone,t-name,t-id,no of players)

1NF:-

m-phone is multivalued attribute.

* M-id,m-name,m-address,m-salary,m-phone,t-name,t-id,no of players)

2NF:-

* (M-id,m-name,m-address,m-salary,m-phone)
* (t-name,t-id,no of players)

3NF:-

* No transitive dependency found.
* (M-id,m-name,m-address,m-salary,m-phone)
* (t-name,t-id,no of players)

Table creation:-

* M-id,m-name,m-address,m-salary,m-phone,**t-id**
* t-name,t-id,no of players

Unique team…..1…..consisted……\*…..players

UNF:-

* Consisted (t-name,t-id,no of players,p-id,p-name,date of birth,p-address,p-phone)

1NF:-

p-phone is the multivalued attribute.

* (t-name,t-id,no of players,p-id,p-name,date of birth,p-address,p-phone)

2NF:-

* (t-name,t-id,no of players)
* (p-id,p-name,date of birth,p-address,p-phone)

3NF:-

* No transitive dependency found.
* (t-name,t-id,no of players)
* (p-id,p-name,date of birth,p-address,p-phone)

Table creation:-

* t-name,t-id,no of players,**p-id**
* p-id,p-name,date of birth,p-address,p-phone

Players…..\*……Play…..\*…….Matches

UNF:-

* Play(p-id,p-name,date of birth,p-address,p-phone,fee,schedule vanue,match-no)

1NF:-

p-phone is the multivalued attribute.

* (p-id,p-name,date of birth,p-address,p-phone,fee,schedule vanue,match-no)

2NF:-

* (p-id,p-name,date of birth,p-address,p-phone)
* (fee,schedule vanue,match-no)

3NF:-

* No transitive dependency found.
* (p-id,p-name,date of birth,p-address,p-phone)
* (fee,schedule vanue,match-no)

Table creation:-

* p-id,p-name,date of birth,p-address,p-phone
* fee,schedule vanue,match-no
* **p-id** , **match-no**

***Rough table***

1. (ch-id, ch-address, ch-name, ch-phone)

2 (ce-id, ce- address, ce-name, ce-phone,ce-salary, ch-id)

3. (ce-id, ce-name, CE\_address, CE phone , ce salary)

4 .(match-no,m-fee,m-schedule,m-vanue)

5~~.( ce-id, ce- name, ce- address, ce-phone, ce- salary)~~

6. (cl- registration No , cl-name, cl-address, cl-phone, CE-id)

7~~.( cl-registration, cl-name, cl-address,cl-phone)~~

8.(M-id, m-name M-phone, M-address, m-salary, eh-registration)

9. ( ch-registration, ch-name, ch-address, co-id)

10.( co-id, co-name, co-phone, co-address, co-salary)

11. ( m-id, M-name, m-address, M-salary, M-phone,t-id)

12~~.(t-id,t-name,no of players)~~

13.(t-id,t-name,no of players,p-id)

14~~.(p-id,p-name,date of birth,p-address,p-phone)~~

15.(p-id,p-name,date of birth,p-address,p-phone)

16~~.(match-no,venue,schedule,fee)~~

17.(p-id, match no)

***Final Table:***

1. (ch-id, ch-address, ch-name, ch-phone)

2 (ce-id, ce- address, ce-name, ce-phone,ce-salary, ch-id)

3. (ce-id, ce-name, CE\_address, CE phone , ce salary)

4 .(match-no,m-fee,m-schedule,m-vanue)

5. (ch- registration No , cl-name, cl-address, elphone, CE-id)

6.(M-id, m-name M-phone, M-address, m-salary, eh-registration)

7. ( ch-registration, ch-name, ch-address, co-id)

8.( co-id, co-name, co-phone, co-address, co-salary)

9. ( m-id, M-name, m-address, M-salary, M-phone,t-id)

10.(t-id,t-name,no of players,p-id)

11. (p-id,p-name,date of birth,p-address,p-phone)

12.(p-id, match no)

***Table Creation:***

1.create table Chairman (ch\_id number (20) primary key, Ch\_address varchar2(20), ch\_name varchar2(20), ch\_phone number(20));

2.create table CEO ( CE\_id number(20) primary key, CE\_address varchar2(20), CE\_name varchar2(20), CE\_salary number(20), Ch\_id number(20));

3.create table CEOMatch ( CE\_id number(20) primary key, CE\_name varchar2(20), CE\_address varchar2(20), CE\_phone number(20), CE\_salary number(20),Match\_No number(20));

4.create table Match( Match\_No number(20) primary key, Fee number(20), schedule varchar2(20), Vanue varchar2(20));

5.create table Club ( cl\_registration number(20) primary key, Cl\_name varchar2(20), Cl\_address varchar2(20), Cl\_phone number(20), CE\_id number(20));

6.create table Manager (M\_id number(20) primary key, M\_name varchar2(20), M\_phone number(20), M\_address varchar2(20), M\_salary number(20), Cl\_registration number(20));

7.create table ClubCoach ( cl\_registration number(20) primary key, Cl\_name varchar2(20), Cl\_address varchar2(20), Cl\_phone number(20), Co\_id number(20));

8.create table Coach (co\_id number(20) primary key, co\_name varchar2(20), co\_phone number(20),co\_address varchar2(20), co\_salary number(20));

9.create table TeamManager (M\_id number(20) primary key, M\_name varchar2(20), M\_phone number(20), M\_address varchar2(20), M\_salary number(20), t\_id number(20));

10.create table TeamPlayer (t\_id number(20) primary key, t\_name varchar2(20), NoOfPlayers number(20), p\_id number(20));

11.create table Player (p\_id number(20) primary key, p\_name varchar2(20), DateOfBirth number(20), p\_phone number(20));

12.create table MatchPlayer (p\_id number(20),Match\_no number(20), primary key(p\_id,Match\_no));