**Topic : Security Guard MS**

**Normalization**

Payment ( Guard\_id , Supervisor\_id , Hire\_date , Service\_type ,AN , Salary\_amount , commission )

1NF : No multivalued attribute .

2NF :

Guard\_id , Supervisor\_id , Hire\_date , Service\_type

AN , Salary\_amount , commission , Guard\_id

3NF:

Guard\_id , Supervisor\_id , Hire\_date , Service\_type

AN , Salary\_amount , commission , Guard\_id

Tables:

Guard\_id , Supervisor\_id , Hire\_date , Service\_type

AN , Salary\_amount , commission , Guard\_id

Has 1 (Guard\_id , Supervisor\_id , Hire\_date , Service\_type, Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number)

1NF : Phone\_number multivalued attribute .

2NF:

Guard\_id , Supervisor\_id , Hire\_date , Service\_type

Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number

3NF:

Guard\_id , Supervisor\_id , Hire\_date , Survice\_type

Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number

Tables:

Guard\_id , Supervisor\_id , Hire\_date , Service\_type

Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number.

Has 2 (Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number ,Supervisor\_id ,First\_name , Last\_name,Branch, Phone\_number)

1NF : Phone\_number multivalued attribute .

2NF:

Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number ,Supervisor\_id

Supervisor\_id ,First\_name , Last\_name,Branch, Phone\_number.

3NF:

Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number ,Supervisor\_id

Supervisor\_id ,First\_name , Last\_name,Branch, Phone\_number.

tables:

Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number ,Supervisor\_id

Supervisor\_id ,First\_name , Last\_name,Branch, Phone\_number.

Manages (Supervisor\_id ,First\_name , Last\_name,Branch, Phone\_number, Manager \_id ,First\_name , Last\_name,Branch, Phone\_number, Email )

1NF : Phone\_number multivalued attribute .

2NF:

Supervisor\_id ,First\_name , Last\_name,Branch, Phone\_number, Manager \_id

Manager \_id ,First\_name , Last\_name,Branch, Phone\_number, Email.

3NF:

Supervisor\_id ,First\_name , Last\_name,Branch, Phone\_number, Manager \_id

Manager \_id ,First\_name , Last\_name,Branch, Phone\_number, Email.

Tables:

Supervisor\_id ,First\_name , Last\_name,Branch, Phone\_number, Manager \_id

Manager \_id ,First\_name , Last\_name,Branch, Phone\_number, Email.

Hiring (Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number , AI\_Code\_Number , Name , Email , Address, Phone\_number)

1NF : Phone\_number multivalued attribute .

2NF:

Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number , AI\_Code\_Number

AI\_Code\_Number , Name , Email , Address, Phone\_number .

3NF:

Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number , AI\_Code\_Number

AI\_Code\_Number , Name , Email , Address, Phone\_number .

Tables:

Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number , AI\_Code\_Number

AI\_Code\_Number , Name , Email , Address, Phone\_number .

Contact\_to (AI\_Code\_Number , Name , Email , Address, Phone\_number , SGC\_Code\_Number , Name , Email , Address, Phone\_number ,Type)

1NF : Phone\_number multivalued attribute .

2NF:

AI\_Code\_Number , Name , Email , Address, Phone\_number .

SGC\_Code\_Number , Name , Email , Address, Phone\_number ,Type

AS\_Code\_Number ,AI\_Code\_Number ,SGC\_Code\_Number.

3NF:

AI\_Code\_Number , Name , Email , Address, Phone\_number .

SGC\_Code\_Number , Name , Email , Address, Phone\_number ,Type.

AS\_Code\_Number ,AI\_Code\_Number ,SGC\_Code\_Number.

Tables:

AI\_Code\_Number , Name , Email , Address, Phone\_number .

SGC\_Code\_Number , Name , Email , Address, Phone\_number ,Type.

AS\_Code\_Number ,AI\_Code\_Number ,SGC\_Code\_Number.

Owns (SGC\_Code\_Number , Name , Email , Address, Phone\_number ,Type, Oid ,First\_name , Last\_name, Phone\_number,Email,Address)

1NF : Phone\_number multivalued attribute .

2NF:

SGC\_Code\_Number , Name , Email , Address, Phone\_number ,Type, Oid

Oid ,First\_name , Last\_name, Phone\_number,Email,Address

3NF:

SGC\_Code\_Number , Name , Email , Address, Phone\_number ,Type, Oid

Oid ,First\_name , Last\_name, Phone\_number,Email,Address

Tables:

SGC\_Code\_Number , Name , Email , Address, Phone\_number ,Type, Oid

Oid ,First\_name , Last\_name, Phone\_number,Email,Address

**Total Table :**

1. Guard\_id , Supervisor\_id , Hire\_date , Service\_type
2. AN , Salary\_amount , commission , Guard\_id
3. Guard\_id , Supervisor\_id , Hire\_date , Service\_type
4. Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number.
5. Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number ,Supervisor\_id
6. Supervisor\_id ,First\_name , Last\_name,Branch, Phone\_number.
7. Supervisor\_id ,First\_name , Last\_name,Branch, Phone\_number, Manager \_id
8. Manager \_id ,First\_name , Last\_name,Branch, Phone\_number, Email.
9. Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number , AI\_Code\_Number
10. AI\_Code\_Number , Name , Email , Address, Phone\_number .
11. AI\_Code\_Number , Name , Email , Address, Phone\_number .
12. SGC\_Code\_Number , Name , Email , Address, Phone\_number ,Type.
13. AS\_Code\_Number ,AI\_Code\_Number ,SGC\_Code\_Number.
14. SGC\_Code\_Number , Name , Email , Address, Phone\_number ,Type, Oid
15. Oid ,First\_name , Last\_name, Phone\_number,Email,Address

**Final Table :**

1. Guard\_id , Supervisor\_id , Hire\_date , Service\_type
2. AN , Salary\_amount , commission , Guard\_id
3. Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number ,Supervisor\_id
4. Supervisor\_id ,First\_name , Last\_name,Branch, Phone\_number, Manager \_id
5. Manager \_id ,First\_name , Last\_name,Branch, Phone\_number, Email.
6. Guard\_id ,First\_name , Last\_name , DOB , Address, Phone\_number , AI\_Code\_Number
7. AI\_Code\_Number , Name , Email , Address, Phone\_number .
8. AS\_Code\_Number ,AI\_Code\_Number ,SGC\_Code\_Number.
9. SGC\_Code\_Number , Name , Email , Address, Phone\_number ,Type, Oid
10. Oid ,First\_name , Last\_name, Phone\_number,Email,Address