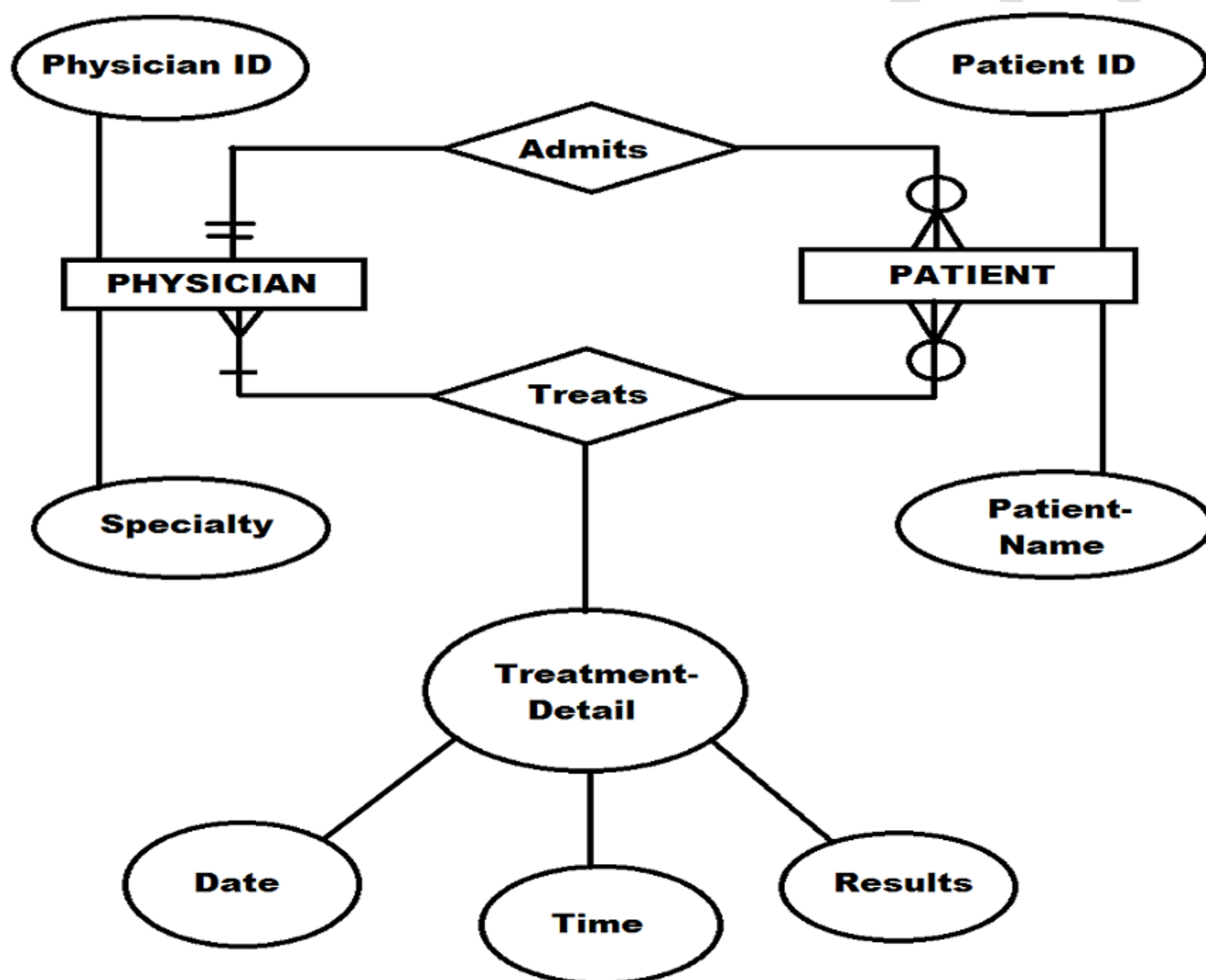


# “Relational Data Base Management System”

## PRACTICAL NO 1

A hospital has a large number of registered physicians. Attributes of PHYSICIAN include Physician\_ID (identifier) and Specialty. Patients are admitted to the hospital by physicians. Attributes of PATIENT include patient\_ID (identifier) and patient\_name. Any admitted must have exactly one admitting physician. A physician may admit any number of patient. Once admitted, a given patient must be treated by at least one physician. A particular physician may treat any number of patients or may not treat any patients. Whenever a patient is treated by a physician, the hospital records the details of the treatment (Treatment\_Detail). Components of Treatment\_Detail include, Time, and Results.

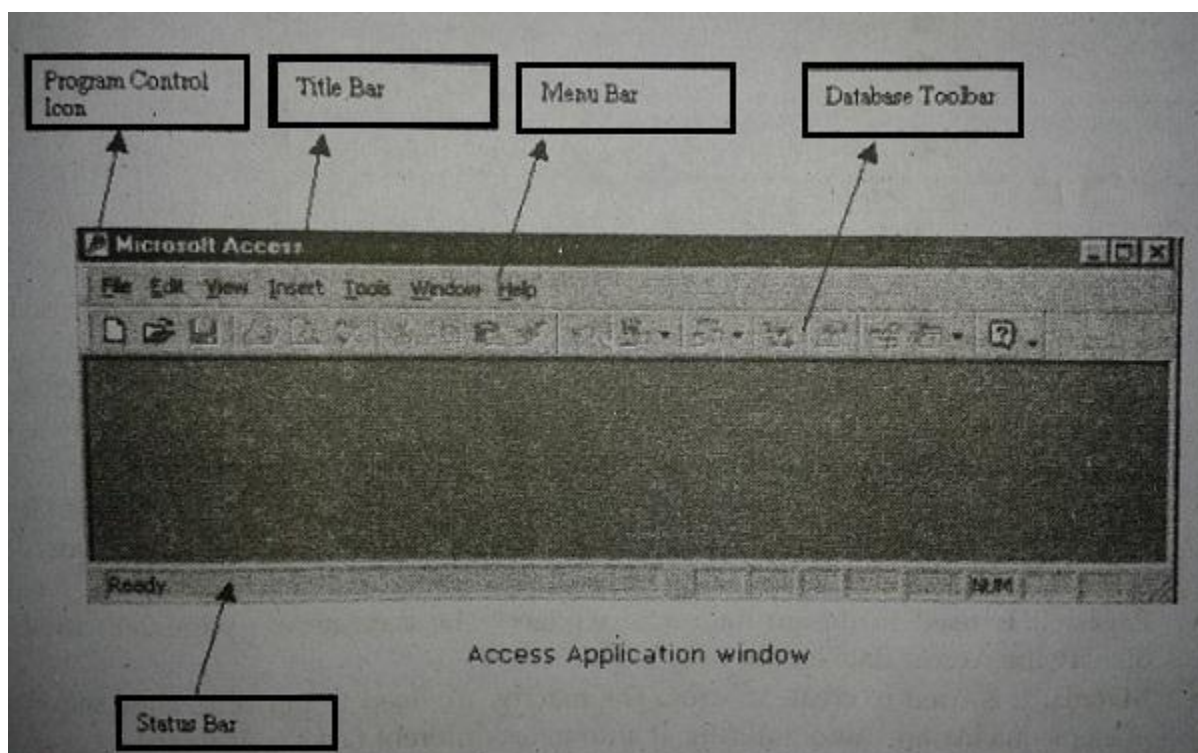
**Solution:.**



## PRACTICAL NO 2

### Microsoft Access:.

Microsoft Access is a relational Database Management System(RDBMS). It is used to store and multiple a large amount of information. It is very easy to understand for users. Its graphical interface helps to users to create queries,forms and repeats easily.Even an inexperienced programmer can use MS Access to perform different activities.The process of entering, updating and reporting information becomes very easy.



### Starting MS Access:.

The following procedure can be used to start MS Access.

- 1)Click start button on Taskbar and select programs menu item.The programs submenu will be displayed.
- 2)Click Microsoft Access program item.MS Access will start OR.
- 3)Double click on Microsoft Access icon on Desktop if it appears.

### Creating and closing a Database:.

The following procedure is used to create a database.

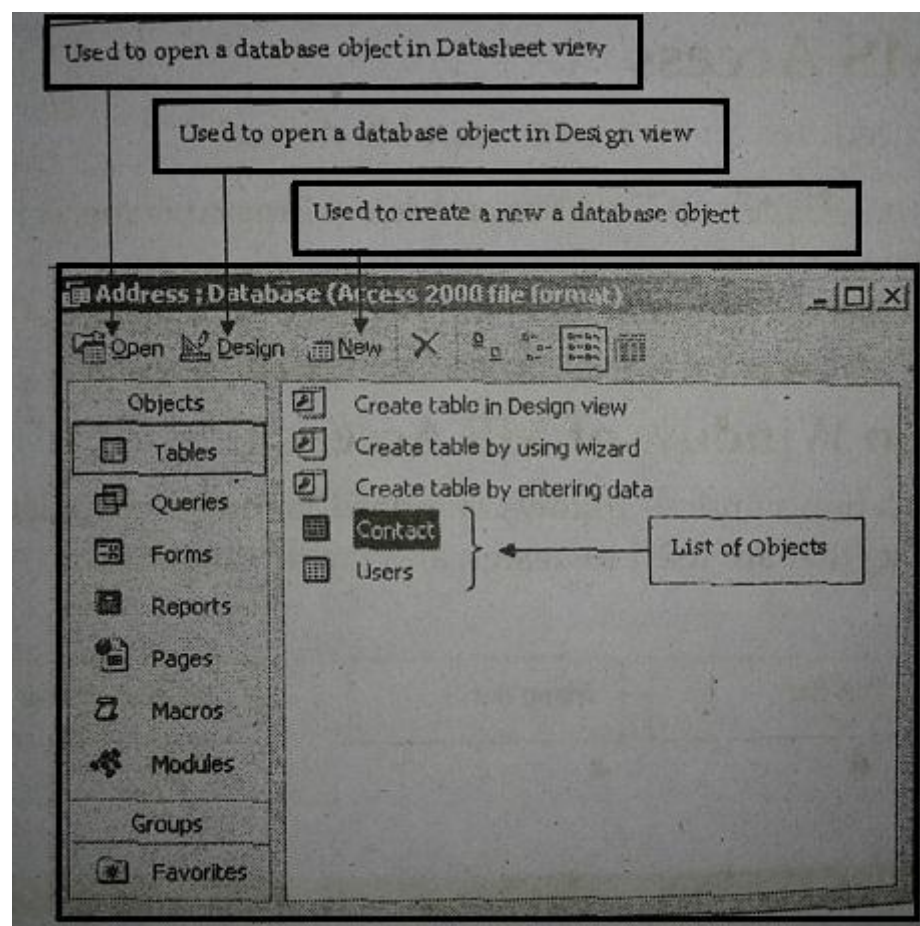
- 1)Click File > New.....MS Access will display the task pan.
- 2)Select Blank Database option. A dialog box will appear.
- 3)Select the desired location.
- 4)Enter any file name.
- 5)Click create button. A blank database will appear.

If the user chooses or create a new database using Database Wizard,Access prompts the user to choose the required templete required.The user then gives the database name and selects the selected templet.

### Creating table in MS Access:.

A table is created in a Database.The option create table in Design of creating a table. Different methods of creating a table are as follows;.

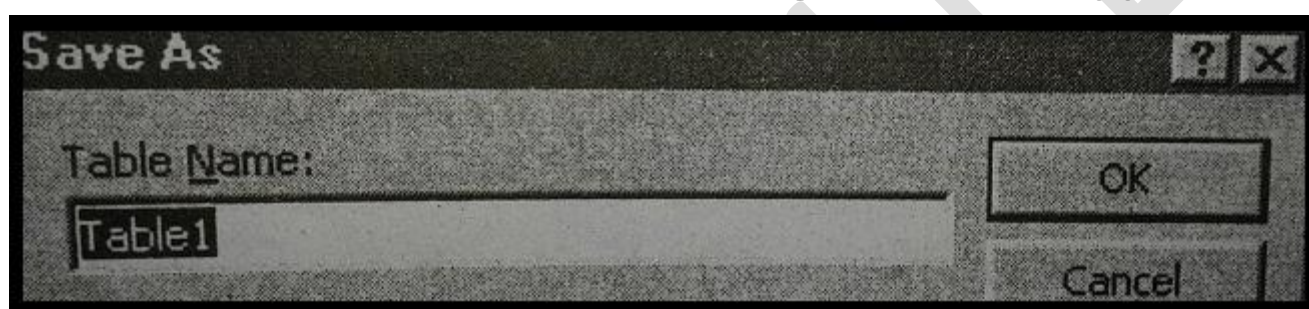
- Creating table in Design view.
- Creating table by wizard.
- Creating table by entering.



### **Saving a table:.**

The following steps are performed to save a table.

- On the Table Design toolbar, Click save OR
- From File menu,select save.The save as dialogue box will appear.



- Entering a table name and click Ok.The table will saved. The new table will appear in the main database.



## PRACTICAL NO 3

A. Creating a new blank database with file name Employees.

B. Create a new table in design view and add fields to the table as follow:

Field Name	Data Type	Description
LastName	Text	Enter employee's surname
FirstName	Text	Enter employee's first name(s)
SocialSecurityNo	Text	Enter Social Security number
BirthDate	Date/Time	Enter birth date
JobTitle	Text	Title of Job
Department	Text	Department name
Salary	Currency	Annual salary
StartDate	Date/Time	Employment start date
FinishDate	Date/Time	Employment finished
SocialClub	Yes/No	In Social Club (yes/no)?

C. Make the social security no field primary key and the table as Employees.

D. Open the table in design view and add five records in the table.

**Procedure:.**

### A. Creating a blank database

1. Click start>program>Microsoft access to start MS Access.
2. Select blank data access database option.
3. Click ok. A dialog box will appear to input data base name.
4. Type employees in file name box.
5. Select my documents folder to save the data base.
6. Click Create. A new data base will be created and the data base window will appear.

### B. Creating a table

1. Click on table object in the main database window.
2. Double click create table in design view in data base window. A new blank table will appear.
3. Type field name last name inn field name column.
4. Press tab key to move data type column and select the data type text.
5. Press tab key to move to description column and type enter employee's surnamed as a comment.
6. Press tab key to move to field name for the next field.
7. Repeat step 2 to 5 until all fields have been defined.

Field Name	Data Type	Description
LastName	Text	Enter employee's surname
FirstName	Text	Enter employee's first name(s)
SocialSecurityNo	Text	Enter Social Security number
BirthDate	Date/Time	Enter birth date
JobTitle	Text	Title of Job
Department	Text	Department name
Salary	Currency	Annual salary
StartDate	Date/Time	Employment start date
FinishDate	Date/Time	Employment finished
SocialClub	Yes/No	In Social Club (yes/no)?

### C. Assigning a primary key

1. Place cursor in Social Security No.
2. Click edit>primary key or click icon on standard tool bar OR
3. Right click social security no and choose primary key from the pop up menu.



Field Name	Data Type	Description
LastName	Text	Enter employee's surname
FirstName	Text	Enter employee's first name
SocialSecurityNo	Text	Enter Social Security number
BirthDate	Date/Time	Enter birth date
JobTitle	Text	Title of Job
Department	Text	Department name

4. Click file>save. The save as dialog box will appear.

5. Enter employees in table name and click ok. The table will be saved.

#### D. Adding records

1. Double click employees table in Data base window. The table will appear in data base window.

LastName	FirstName	SocialSecurityNo	BirthDate

Record: 1 of 1

2. Type "Muhammad" in last name field.

3. Press tab to move to next column and type "Ali".

LastName	FirstName	SocialSecurityNo	BirthDate
Muhammad	Ali		

Record: 1 of 1

4. Enter data in all columns in the same way.

5. Repeat step 2 to 4 to add remaining four records.

LastName	FirstName	SocialSecurityNo	DO	Job Title
Muhammad	Ali	10-13-0bcx	30-Mar-74	Sales Manager
Uzair	Hasan	30-13-0bdx	01-Oct-85	Inventory officer
Abdullah	Ahmed	19-13-0bdx	13-Jan-83	Sales Officer
Umar	Abdullah	18-13-0bdx	03-Oct-77	Controller
Asad	Raza	13-13-0bdx	10-Sep-73	Supervisor

Record: 5 of 5



## PRACTICAL NO 4

- a) Open Employees table used in practical 3 and change Field size property of social security no to 11.
- b) Change Decimal places property of salary field to 0(zero).
- c) Choose short data from Format property box Birth Data Field.
- d) Add a caption to each field as shown below and save changes.

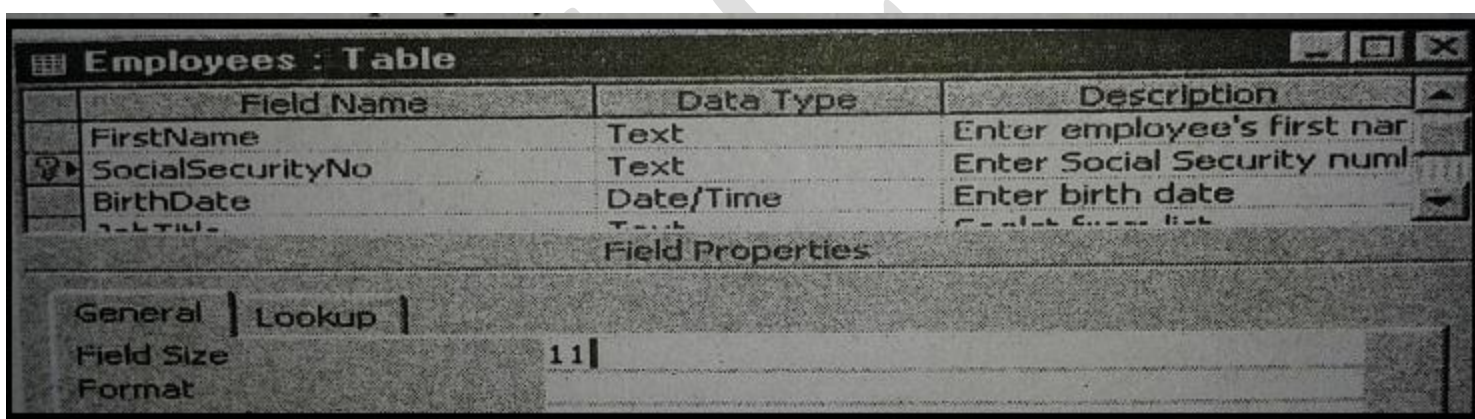
Field	Caption	Field	Caption
Last Name	Surname	Department	Department
First Name	Forename(s)	Salary	Salary
SocialSecurityNumber	SocialSecurityNo	StartDate	Start Date
BirthDate	DOB	Finish Date	Finish Date
JobTitle	Job Title	SocialClub	SocialClubMember?

- e) Set department field to required.
- f) Change data format of DOB to medium,date.

### Procedure:.

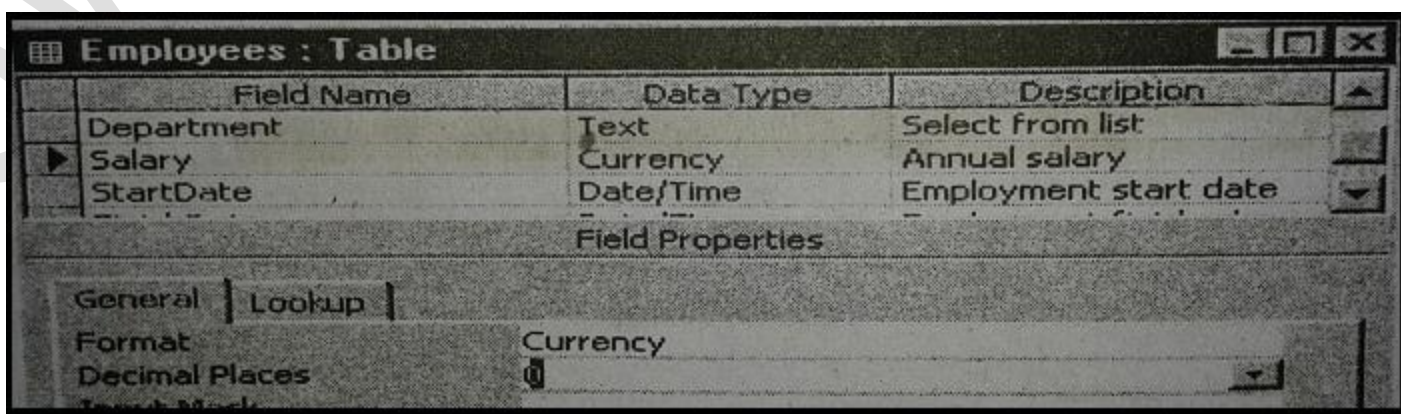
#### A. Changing the Field Size Property:.

- 1) Open a table in design view.
- 2) Select SocialSecurityNo field.
- 3) Type 11 in Field Size property box.



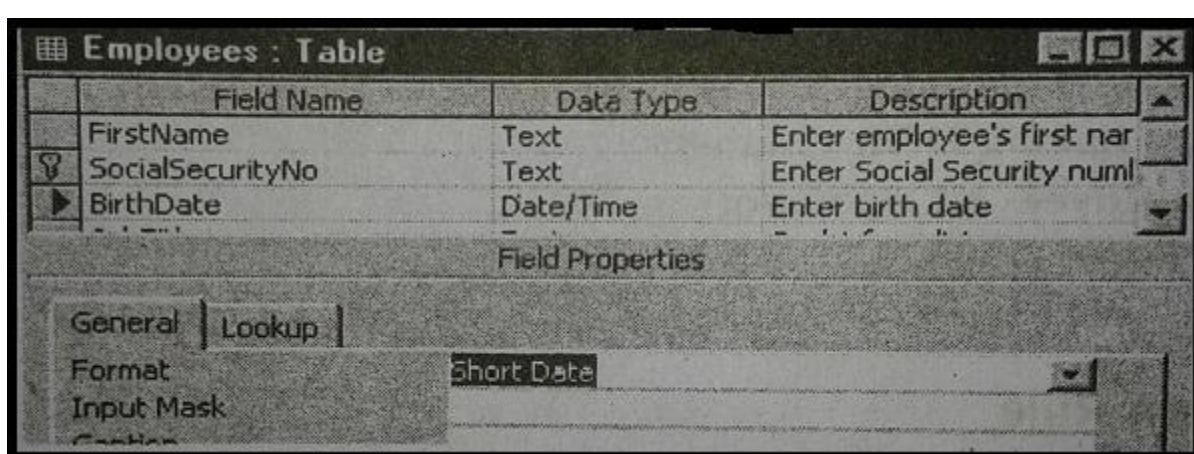
#### B. Changing Decimal Places Property:.

- 1) Select salary field from table design view.
- 2) Select 0 in decimal places property box.



#### C. Changing Date Format:.

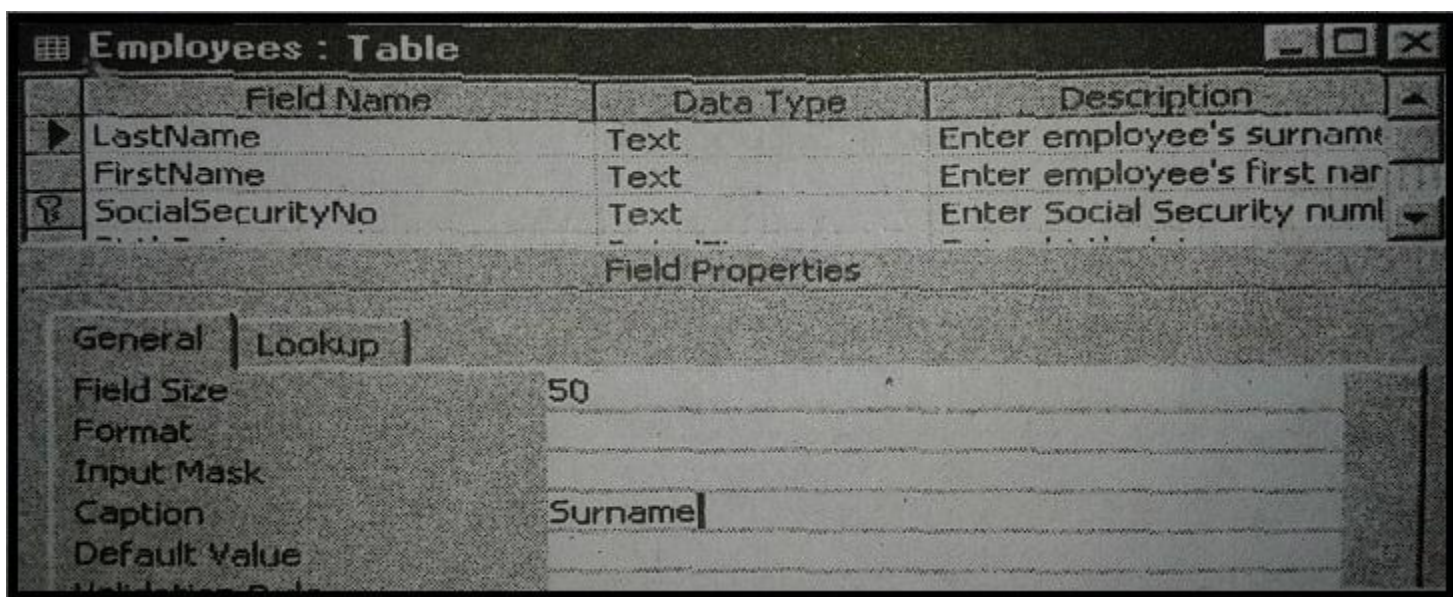
- 1) Select Birth Of Date field from table design view.
- 2) Choose short date from Format property box.





#### D. Adding Caption:.

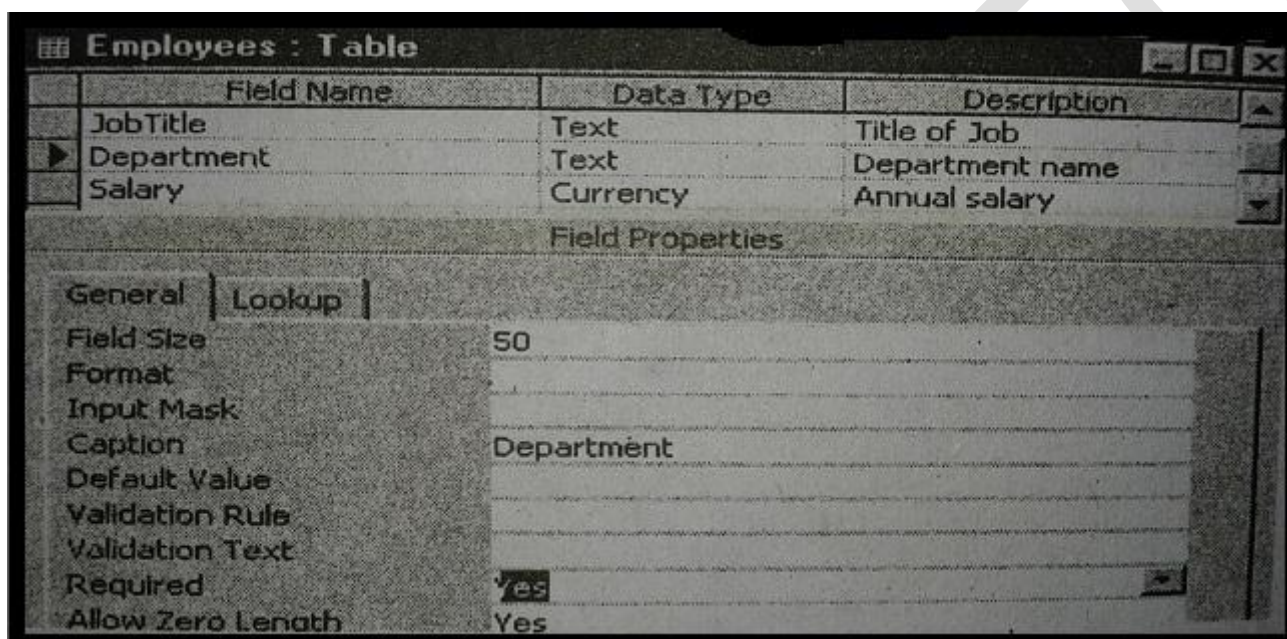
- 1) Select last name field from table design view.
- 2) Type surname in caption property box.



- 3) Repeat step 1 and 2 to property box. Captions to all other fields.

#### E. Setting Required Property:.

- 1) Select Department field and choose yes from required property box.



#### F. Changing Date Format to Medium:.

- 1) Select Birth Date field.
- 2) Choose Medium Date from Format property box.

