SQLServer Lab

a. Create the following database using wizard Consists of 2 File Groups { SeconderyFG (has two data files) and ThirdFG (has two data files) }

Database Name	SD
Location	(Default path)
Initial size for mdf	25 MB
File Group for mdf	Primary
File Growth for mdf	10%
Max. File Size for mdf	400MB
Log File Name	SD-Log
Location for Log	(Default Path)
Initial Size for Log	15 MB
File Growth	20%
Log File Max. Size	400 MB

1. Create the following tables with all the required information and load the required data as specified in each table using insert statements[at least two rows]

Tablename	Details			Comments
Department	**DeptNo (PK)**	**DeptName**	**Location**	1-Create it by code 2-Create a new user data type named loc with the following Criteria:
	d1	Research	NY	
	d2	Accounting	DS	• nchar(2)
	d3	Markiting	KW	• default:NY
				• create a rule for this Datatype :values in (NY,DS,KW)) and associate it to the

		location column
Employee		1-Create it by code 2-PK constraint on EmpNo 3-FK constraint on DeptNo 4-Unique constraint on Salary 5-EmpFname, EmpLname don't accept null values 6-Create a rule on Salary column to ensure that it is less than 6000

Employee

EmpNo (PK)	Emp Fname	Emp Lname	Dept No	Salary
25348	Mathew	Smith	d3	2500
10102	Ann	Jones	d3	3000
18316	John	Barrimore	d1	2400
29346	James	James	d2	2800
9031	Lisa	Bertoni	d2	4000
2581	Elisa	Hansel	d2	3600
28559	Sybl	Moser	d1	2900

Project

ProjectNo (PK)	ProjectName	Budget
p1	Apollo	120000
p2	Gemini	95000
p3	Mercury	185600

Project location column:
1-Create it using wizard
2-ProjectName can't contain null values
3-Budget allow null

Works_on

EmpNo (PK)	ProjectNo (PK)	Job	Enter_Date
10102	p1	Analyst	2006.10.1
10102	p3	Manager	2012.1.1
25348	p2	Clerk	2007.2.15
18316	p2	NULL	2007.6.1
29346	p2	NULL	2006.12.15
2581	p3	Analyst	2007.10.15
9031	p1	Manager	2007.4.15
28559	p1	NULL	2007.8.1

Works_on location column:
1-Create it using wizard
2- EmpNo INTEGER NOT NULL
3-ProjectNo doesn't accept null values
4-Job can accept null
5-Enter_Date can't accept null and has the current system date as a default value[visually]
6-The primary key will be

	28559	p2	Clerk	2012.2.1	EmpNo,ProjectNo)
	9031	p3	Clerk	2006.11.15	7-there is a relation between works_on and employee, Project tables
	29346	p1	Clerk	2007.1.4	
Testing Referential Integrity	1-Add new employee with EmpNo =11111 In the works_on table [what will happen] 2-Change the employee number 10102 to 11111 in the works on table [what will happen] 3-Modify the employee number 10102 in the employee table to 22222. [what will happen] 4-Delete the employee with id 10102				
Table modification	1-Add TelephoneNumber column to the employee table[programmatically] 2-drop this column[programmatically] 3-Bulid A diagram to show Relations between tables				

2. Create the following schema and transfer the following tables to it
    a. Company Schema
        i. Department table (Programmatically)
        ii. Project table (using wizard)
    b. Human Resource Schema
        i. Employee table (Programmatically)

3. Write query to display the constraints for the Employee table.
4. Create Synonym for table Employee as Emp and then run the following queries and describe the results
    a. Select * from Employee
    b. Select * from [Human Resource].Employee
    c. Select * from Emp
    d. Select * from [Human Resource].Emp

5. Increase the budget of the project where the manager number is 10102 by 10%.
6. Change the name of the department for which the employee named James works.The new department name is Sales.

7. Change the enter date for the projects for those employees who work in project p1 and belong to department 'Sales'. The new date is 12.12.2007.
8. Delete the information in the works_on table for all employees who work for the department located in KW.
9. Try to Create Login Named(ITIStud) who can access Only student and Course tablesfrom ITI DB then allow him to select and insert data into tables and deny Delete and update .(Use ITI DB)