<u>Part 01</u>

Create a database "by Wizard" named "RouteCompany"

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]

Table Name	Details			Comments
Department	DeptNo (PK)	DeptName	Location	1-Create it programmatically [By Code]
	d1	Research	NY	
	d2	Accounting	DS	
	d3	Marketing	KW	

Employee

EmpNo (PK)	EmpFname	EmpLname	DeptNo	Salary
25348	Mathew	Smith	d3	2500
10102	Ann	Jones	d3	3000
18316	John	Barrymore	d1	2400
29346	James	James	d2	2800
9031	Lisa	Bertoni	d2	4000
2581	Elisa	Hansel	d2	3600
28559	Sybl	Moser	d1	2900

1-Create it programmatically

2-PK constraint on EmpNo

3-FK constraint on DeptNo

4-Unique constraint on Salary

5-EmpFname, EmpLname don't accept null values

Project

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

1-Create it by Wizard

2-ProjectName can't contain null values

3-Budget allow null

Works_on					1-Create it Wizard
	EmpNo (PK)	**ProjectNo(PK)**	**Job**	**Enter_Date**	2- EmpNo INTEGER NOT NULL
	10102	p1	Analyst	2006.10.1	3-ProjectNo doesn't accept null values
	10102	p3	Manager	2012.1.1	4-Job can accept null
	25348	p2	Clerk	2007.2.15	5-Enter_Date can't accept null
	18316	p2	NULL	2007.6.1	and has the current
	29346	p2	NULL	2006.12.15	system date as a default
	2581	p3	Analyst	2007.10.15	value[visually]
	9031	p1	Manager	2007.4.15	6-The primary key will be EmpNo,ProjectNo)
	28559	p1	NULL	2007.8.1	7-there is a relation
	28559	p2	Clerk	2012.2.1	between works_on and
	9031	p3	Clerk	2006.11.15	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-Build 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
        ii. Project table
    b. Human Resource Schema
        i. Employee table

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

5. 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.
6. Delete the information in the works_on table for all employees who work for the department located in KW.

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Part 02

1. Create a stored procedure to show the number of students per department.[use ITI DB]

2. Create a stored procedure that will check for the Number of employees in the project 100 if they are more than 3 print message to the user "'The number of employees in the project 100 is 3 or more'" if they are less display a message to the user "'The following employees work for the project 100'" in addition to the first name and last name of each one. [MyCompany DB]

1. Create a stored procedure that will be used in case an old employee has left the project and a new one becomes his replacement. The procedure should take 3 parameters (old Emp. number, new Emp. number and the project number) and it will be used to update works_on table. [MyCompany DB]

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