SQLServer Lab

Part 1:

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 |

 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 |
| | d1 | Research | NY | 2-Create a new user data type named loc with the following |
| | d2 | Accounting | DS | Criteria: |
| | d3 | Markiting | KW | nchar(2)default:NY |
| | | | | create a rule for this |
| | | | | Datatype :values in |
| | | | | (NY,DS,KW)) and associate it to the |

| | | | | | | location column |
|----------|------------------|-------------------|----------|-----------|--------|--|
| Employee | EmpNo | Emp | Emp | Dept | Salary | 1-Create it by code |
| | (PK) | Fname | Lname | No | | 2-PK constraint on EmpNo |
| | 25348 | Mathew | Smith | d3 | 2500 | 3-FK constraint on DeptNo 4-Unique constraint on Salary |
| | 10102 | Ann | Jones | d3 | 3000 | 5-EmpFname, EmpLname |
| | 18316 | John | Barrimor | e d1 | 2400 | don't accept null values |
| | 29346 | James | James | d2 | 2800 | 6-Create a rule on Salary |
| | 9031 | Lisa | Bertoni | d2 | 4000 | column to ensure that it is |
| | 2581 | Elisa | Hansel | d2 | 3600 | less than 6000 |
| | 28559 | Sybl | Moser | d1 | 2900 | |
| Project | ProjectN (PK) | | tName | Budget | | 1-Create it using wizard 2-ProjectName can't contain |
| | p1 | Apollo | | 120000 | | null values |
| | p2 | Gemir | ni | 95000 | | 3-Budget allow null |
| | р3 | Mercu | ıry | 185600 | | |
| Works_on | EmpNo (PK) | ProjectNo (PK) | Job | Enter_Dat | e | 1-Create it using wizard 2- EmpNo INTEGER |
| | 10102 | p1 | Analyst | 2006.10. | 1 | NOT NULL |
| | 10102 | р3 | Manager | 2012.1.1 | | 3-ProjectNo doesn't accept |
| | 25348 | p2 | Clerk | 2007.2.1 | 5 | null values |
| | 18316 | p2 | NULL | 2007.6.1 | | _4-Job can accept null 5-Enter_Date can't accept null |
| | 29346 | p2 | NULL | 2006.12. | 15 | and has the current system |
| | 2581 | p3 | Analyst | 2007.10. | 15 | date as a default |
| | 9031 | p1 | Manager | 2007.4.1 | 5 | value[visually] |
| | 28559 | p1 | NULL | 2007.8.1 | | 6-The primary key will be |

| | 28559 | p2 | Clerk | 2012.2.1 | EmpNo,ProjectNo) | |
|--------------|---|----|-------|------------|-------------------------------|--|
| | 9031 | р3 | Clerk | 2006.11.15 | 7-there is a relation between | |
| | 29346 | p1 | Clerk | 2007.1.4 | works_on and employee, | |
| | | | | | Project tables | |
| | | | | | | |
| | | | | | | |
| Testing | 1-Add new employee with EmpNo =11111 In the works_on table [what will | | | | | |
| Referential | happen] | | | | | |
| Integrity | 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 | 1-Add TelephoneNumber column to the employee table[programmatically] | | | | | |
| modification | 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)