DBMS LAB WEEK5

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PES2UG19CS075
SECTION B

SQL DML- Insert (using select) Update and delete, Transactions commit rollback and savepoint.

1. SQL DML

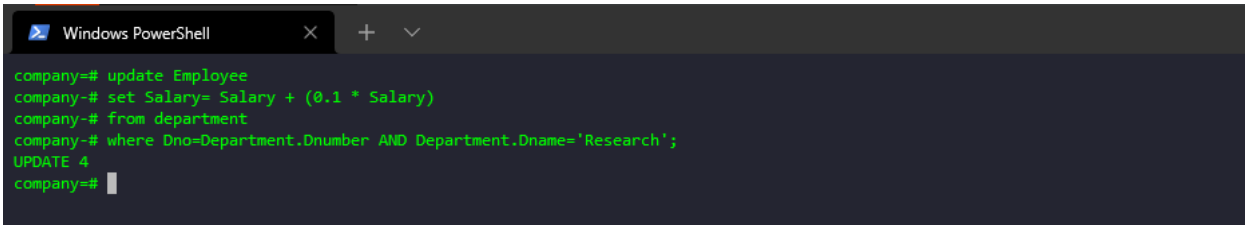
- Create a temporary table that has the employee last name, project name, and hours per week for each employee working on a project. Insert the values into the table using insert into with select command.

```
Windows PowerShell
company=# \c
You are now connected to database "company" as user "atul".
company=# create table temp_table(
company(# Lname         varchar(15)     NOT NULL,
company(# Pname         varchar(15)     NOT NULL,
company(# Hours         decimal(3,1)    NOT NULL
company(# );
CREATE TABLE
company=# insert into temp_table
company-# select E.Lname, P.Pname, W.Hours from Employee E, Project P, Works_On W
company-# where E.Ssn=W.Essn AND P.Pnumber=W.Pno;
INSERT 0 15
company=# select * from temp_table;
  lname   |      pname      | hours
----------+-----------------+-------
 Smith    | ProductX        |  32.5
 Smith    | ProductY        |   7.5
 Narayan  | ProductZ        |  40.0
 English  | ProductX        |  20.0
 English  | ProductY        |  20.0
 Wong     | ProductY        |  10.0
 Wong     | ProductZ        |  10.0
 Wong     | Computerization |  10.0
 Wong     | Reorganization  |  10.0
 Zelaya   | Newbenefits     |  30.0
 Zelaya   | Computerization |  10.0
 Jabbar   | Computerization |  35.0
 Jabbar   | Newbenefits     |   5.0
 Wallace  | Newbenefits     |  20.0
 Wallace  | Reorganization  |  15.0
(15 rows)

company=#
```

- Update the location and controlling department number of project number 10 to ‘Bellaire’ and 5, respectively.

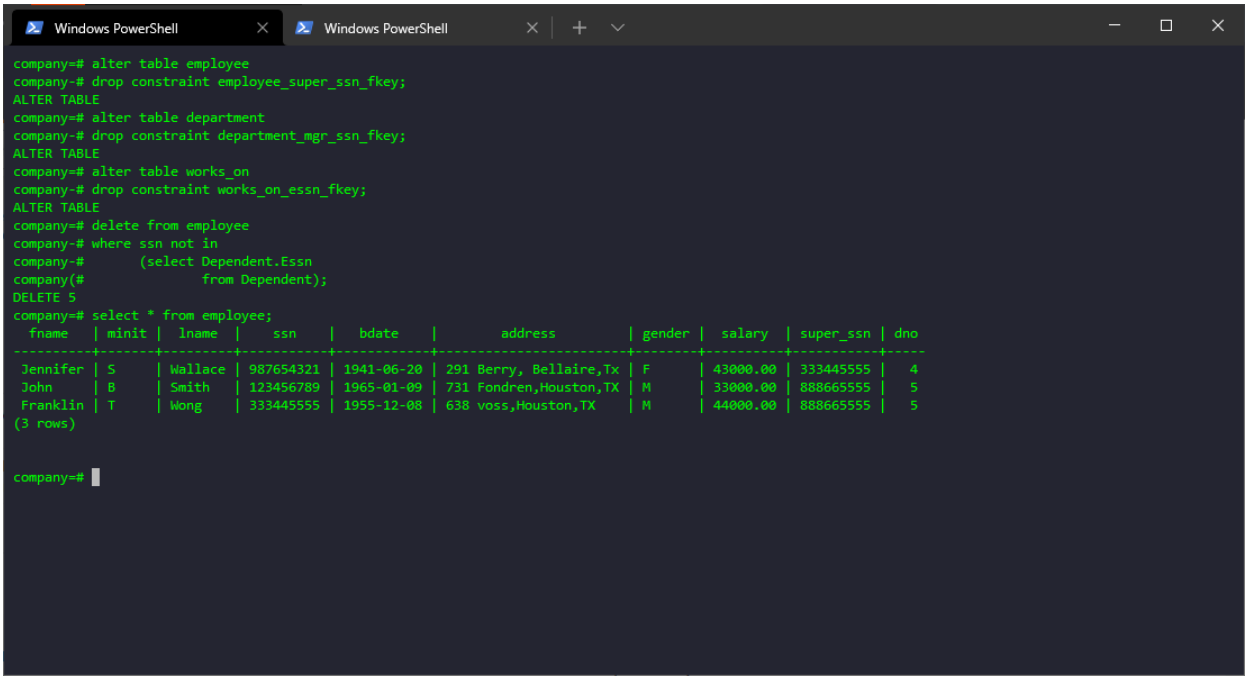
```
company=# update project
company-# set Plocation='Bellaire', Dnum=5
company-# where Pnumber=10;
UPDATE 1
company=# select * from project
company-# where pnumber=10;
      pname      | pnumber | plocation | dnum
-----------------+---------+-----------+------
 Computerization |      10 | Bellaire  |    5
(1 row)

company=#
```

- Give all employees in the ‘Research’ department a 10% raise in salary.



- Delete employee record whose lname =’Brown’

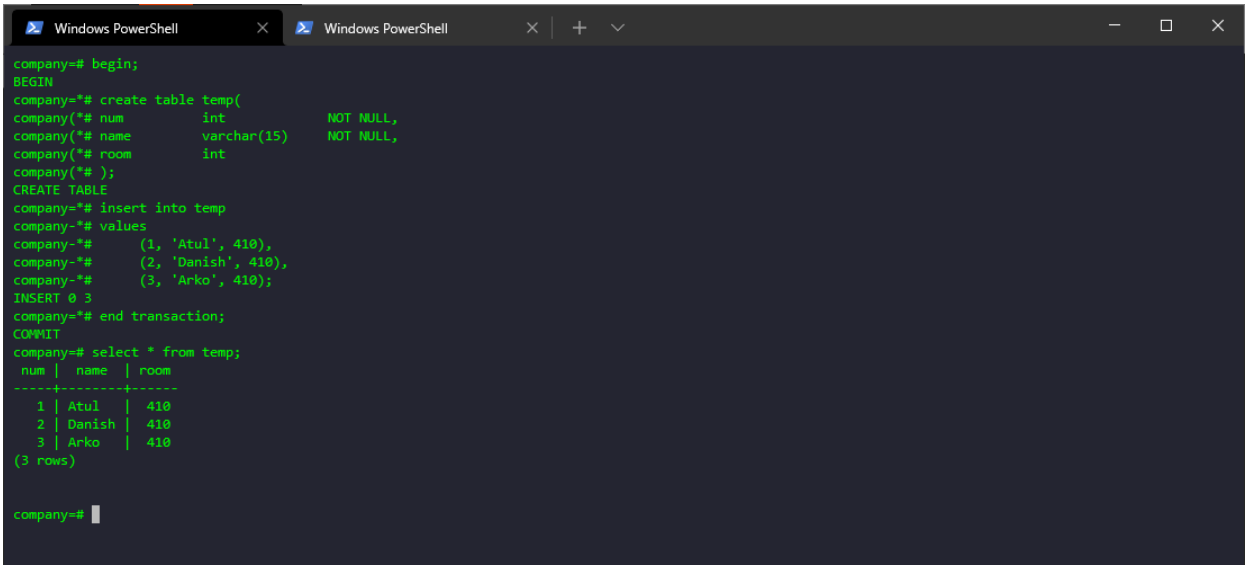
- Delete all the records of the employee who doesn’t have dependent. (Use sub query).



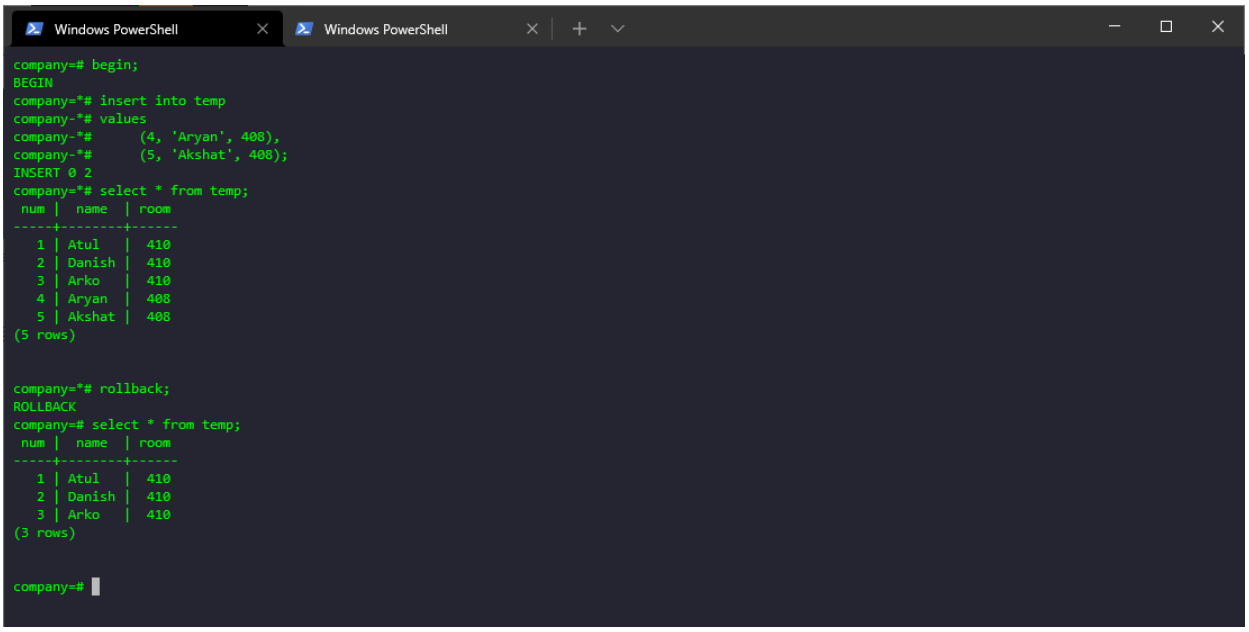
2. Transactions

Create a transaction using begin and end commands consisting of the following sql statements.

- Create a transaction consisting of a create table and multiple insert statements. After End transaction the changes should be committed and can be checked using select statement.



- For the above transaction introduce a roll back after inserting 2 records. The create and insert should not be reflected in the database.



- For the first transaction introduce a save point after inserting 2 records and insert 2 more records and rollback to savepoint . They database should reflect only first 2 insert.