**REQUIREMENTS:**

db2 create table employee(emp-id int, emp-name

varchar(50),designation varchar(30),joindate date,

salary double, address varchar (25), work-location varchar(15), shift varchar(10));

You can create a table in the above mentioned structure. You have to create another program with the corresponding SQL table for the same table and instead of the DB2 query, the SQL query must be executed. Do let me know if you need further information regarding this.

**DESIGN PHASE:**

**ARCHITECTURE:**

**PROGRAMMING ETL**

DB2

**SQL**

**Convert CSV file into SQL table**

Store the data in csv file

Fetch data from the DB2 table

Insert data into SQL

SQL queries

**Flow chart:**

**Loading each line in oracle table**

**Reading data line by line from CSV file**

**Creating directory in local disc using UTL package**

**Exporting the data from DB2 environment to CSV format file**

**Creating table in the DB2 environment**

**DB2**

**Environment**

**[IBM Cloud]**

**Oracle**

**Environment**

**Algorithm:**

**Step1**: Creating a table in DB2 environment.

**Step2**: Inserting the data into DB2 table.

**Step3**: Export the data from DB2 environment to CSV format file.

**Step4**: Open the Oracle database and login as super user.

**Step5**: Create a directory in local disk.

**Step6**: Giving permissions to the normal user to access the directory and UTL file package.

**Step7**: Login as normal user.

**Step8**: Create the table with the same structure as DB2 table.

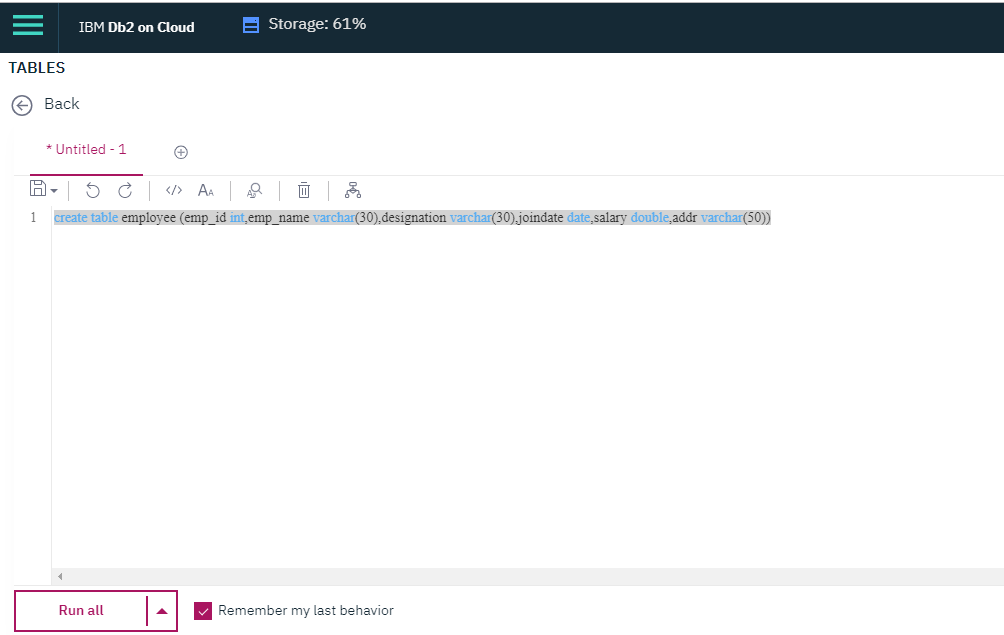
**Step9**: Create procedure to access the UTL\_file package.

**Step10**: Reading the data line by line from CSV file using UTL package.

**Step11**: Loading data into Oracle database.

**Step12**: Test the conversion by retrieving the data from table.

CODING PHASE:



**CREATE TABLE employee**

**(emp\_id INT NOT NULL,**

**emp\_name VARCHAR(30),**

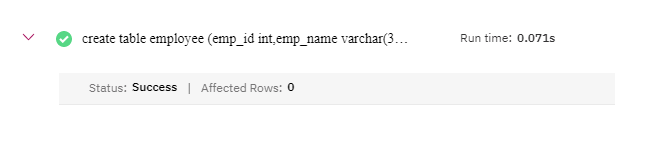
**designation VARCHAR (30),**

**joindate DATE,**

**salary DOUBLE,**

**addr VARCHAR (50),**

**CONSTRAINT p\_e\_id PRIMARY KEY (Emp\_id))**

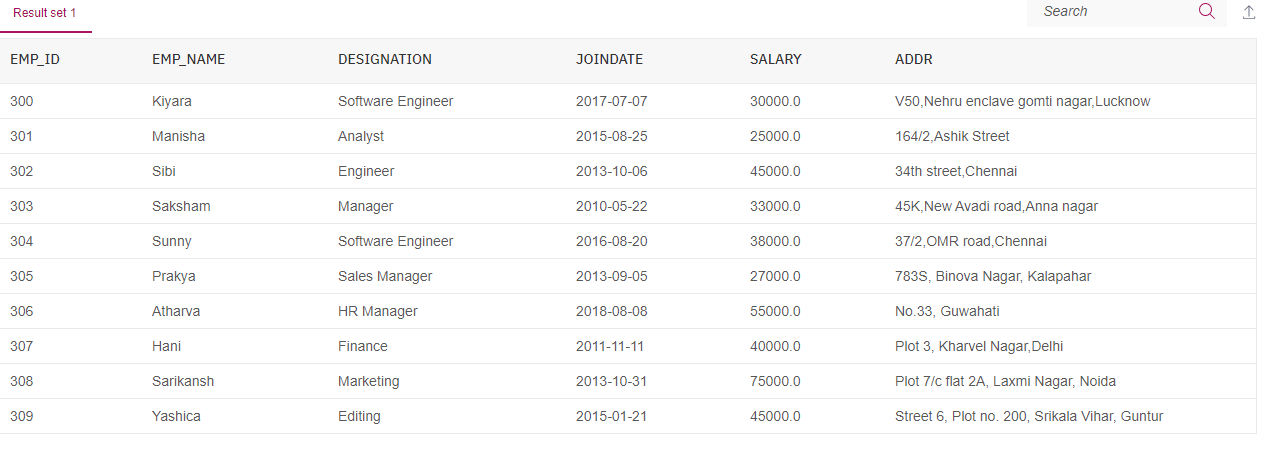


**INSERT INTO employee VALUES (s1.nextval,'Kiyara','Software Engineer','07-07-2017',30000,'V50,Nehru enclave gomti nagar,Lucknow')**

**INSERT INTO employee VALUES (s1.nextval,'Hani','Finance','2011-11-11',40000,'Plot 3, Kharvel Nagar,Delhi')**

**INSERT INTO employee VALUES (s1.nextval,'Yashica','Editing','2015-01-21',45000,'Street 6, Plot no. 200, Srikala Vihar, Guntur')**

**Select \* from employee**

****

**create or replace procedure import\_file is**

**ecount number := 1;**

**e\_line varchar2(2000);**

**f utl\_file.file\_type;**

**e\_dir varchar2(250);**

**fname varchar2(50);**

**Comma1 varchar(10);**

**Comma2 varchar(10);**

**Comma3 varchar(10);**

**Comma4 varchar(10);**

**Comma5 varchar(10);**

**e\_empid number;**

**e\_ename varchar2(30);**

**e\_design varchar2(30);**

**e\_date varchar2(10);**

**e\_sal number;**

**e\_add varchar2(50);**

**begin**

**e\_dir := 'C:\PLP';**

**fname := 'export.csv';**

**f := utl\_file.fopen('IMPORT\_DIR',fname,'r');**

**loop**

**begin**

**if (ecount = 1) then**

**utl\_file.get\_line(f,e\_line);**

**utl\_file.get\_line(f,e\_line);**

**ecount := 0;**

**else**

**utl\_file.get\_line(f,e\_line);**

**end if;**

**dbms\_output.put\_line(e\_line);**

**exception**

**when no\_data\_found then**

**exit;**

**WHEN OTHERS THEN**

**DBMS\_output.put\_line(sqlerrm);**

**end;**

**Comma1 := INSTR(e\_line, '",' ,1 , 1);**

**Comma2 := INSTR(e\_line, '",' ,1 , 2);**

**Comma3 := INSTR(e\_line, '",' ,1 , 3);**

**Comma4 := INSTR(e\_line, '",' ,1 , 4);**

**Comma5 := INSTR(e\_line, '",' ,1 , 5);**

**e\_empid := SUBSTR(e\_line, 2, Comma1-2);**

**DBMS\_output.put\_line(e\_empid);**

**e\_ename := SUBSTR(e\_line, Comma1+3, Comma2-comma1-3);**

**DBMS\_output.put\_line(e\_ename);**

**e\_design := SUBSTR(e\_line, Comma2+3, Comma3-comma2-3);**

**DBMS\_output.put\_line(e\_design);**

**e\_date := SUBSTR(e\_line, Comma3+3, Comma4-comma3-3);**

**DBMS\_output.put\_line(e\_date);**

**e\_sal := SUBSTR(e\_line, Comma4+3, Comma5-comma4-3);**

**DBMS\_output.put\_line(e\_sal);**

**e\_add := RTRIM(SUBSTR(e\_line, comma5+3),'"');**

**DBMS\_output.put\_line(e\_add);**

**insert into import\_table values (e\_empid,e\_ename,e\_design,to\_date(e\_date,'yy-mm-dd'),e\_sal,e\_add);**

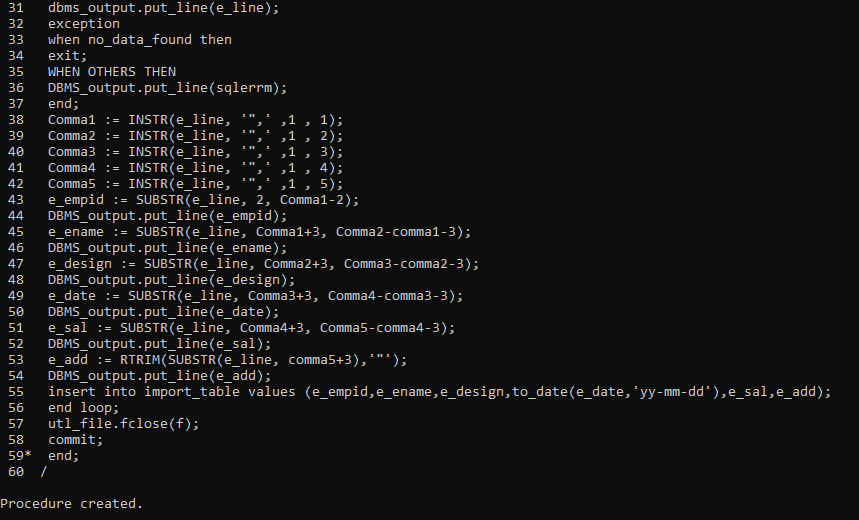
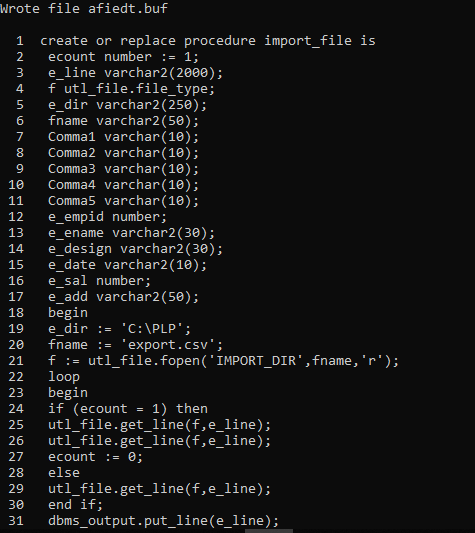
**end loop;**

**utl\_file.fclose(f);**

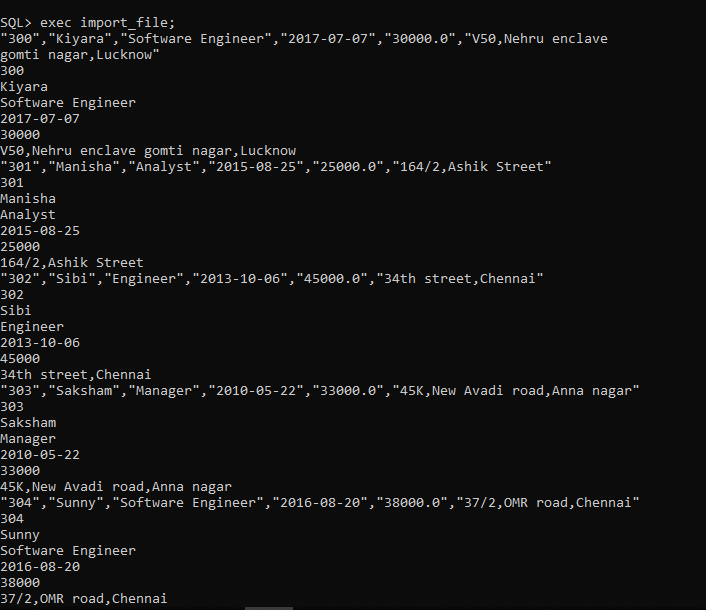
**commit;**

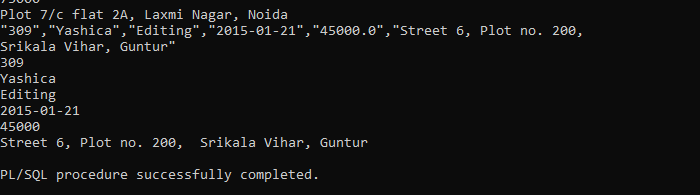
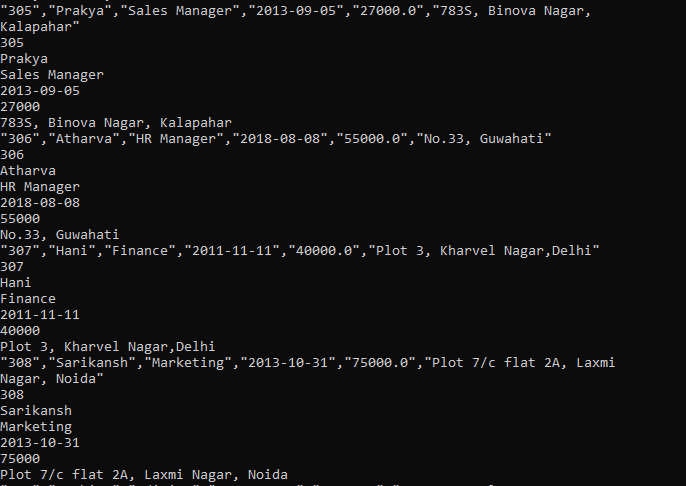
**end;**

**/**

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**exec import\_file**

****

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**Select \* from import\_table;**

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