* **MAULANA AZAD NATIONAL INSTITUTE OF TECHNOLOGY**

**Name:** Vivek Kumar Ahirwar **Scholar No:** 191112419

**Department:** CSE **Section:**3

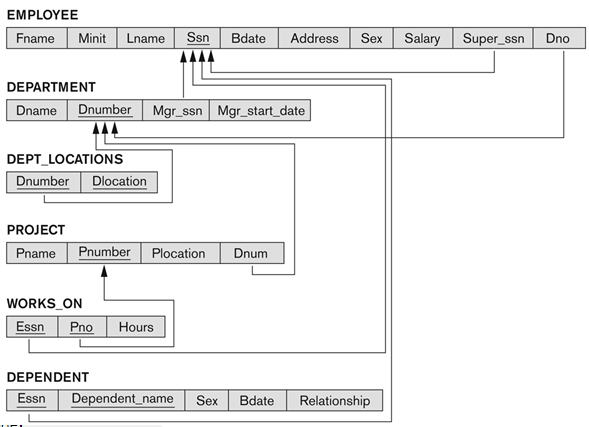
**Semester:** 4th **Subject:** DBMS Lab

**Date:** 01/02/2021

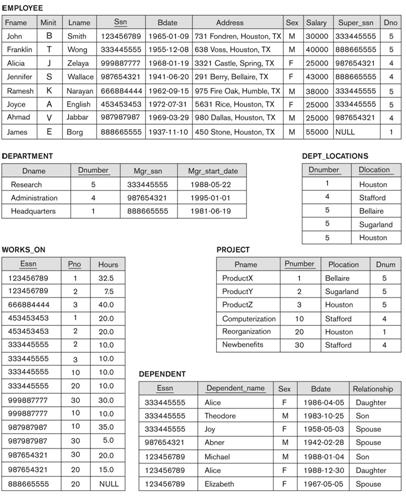
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| --- | --- | --- |
| **Subject** | **DBMS LAB** | **Session: Jan- 2021** |
| **Sub. Code:** | **CSE-227** | **Semester: IV (CSE)** |
| **Name of Teacher** | **Dr. Sweta Jain, & Dr. Nikhil Kumar Singh** |  |

DBMS: LAB-ASSIGNMENT 3

**Prog7: Create Company data base and Table as follow**

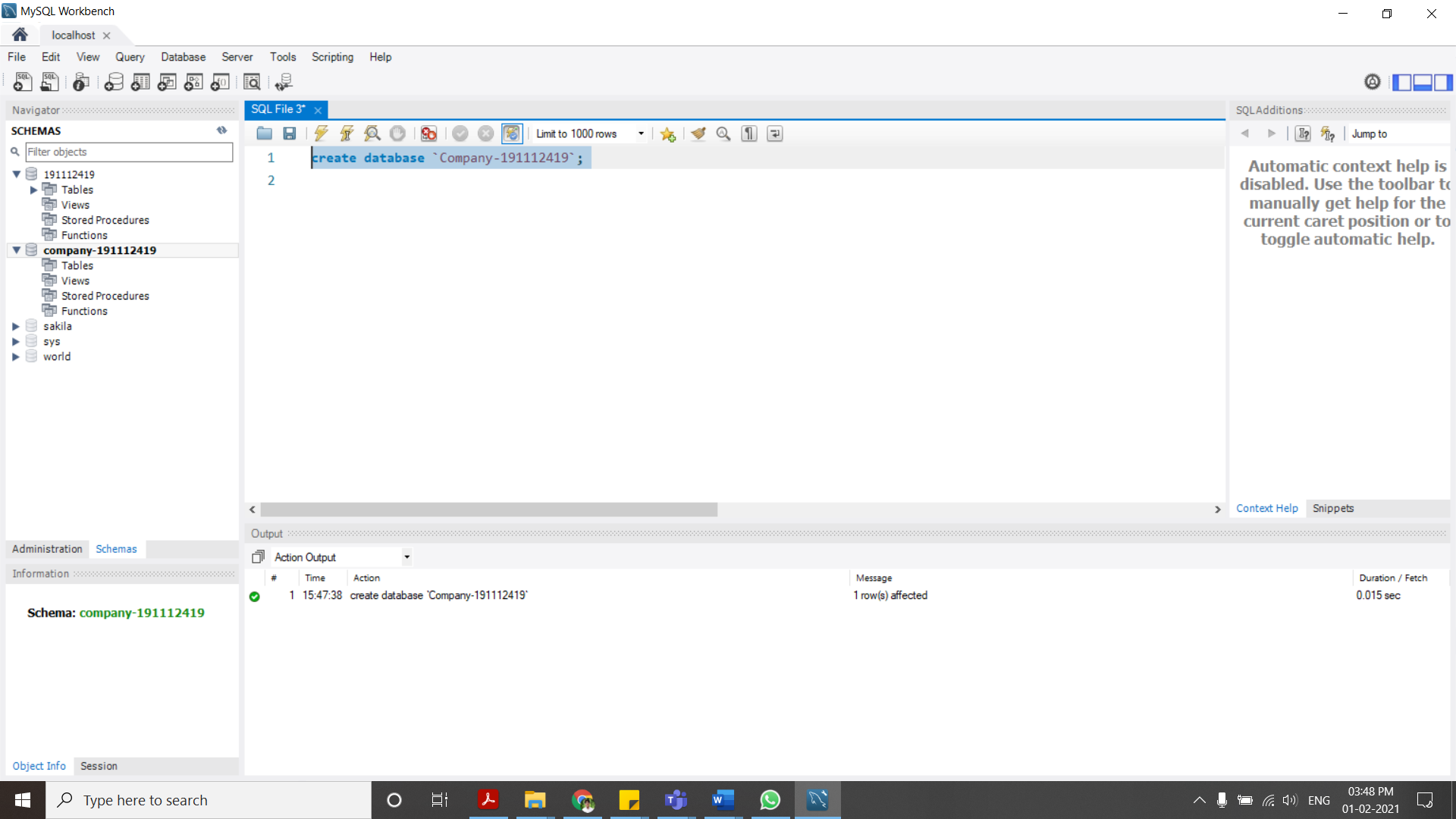
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**Insert following values in respective table.**

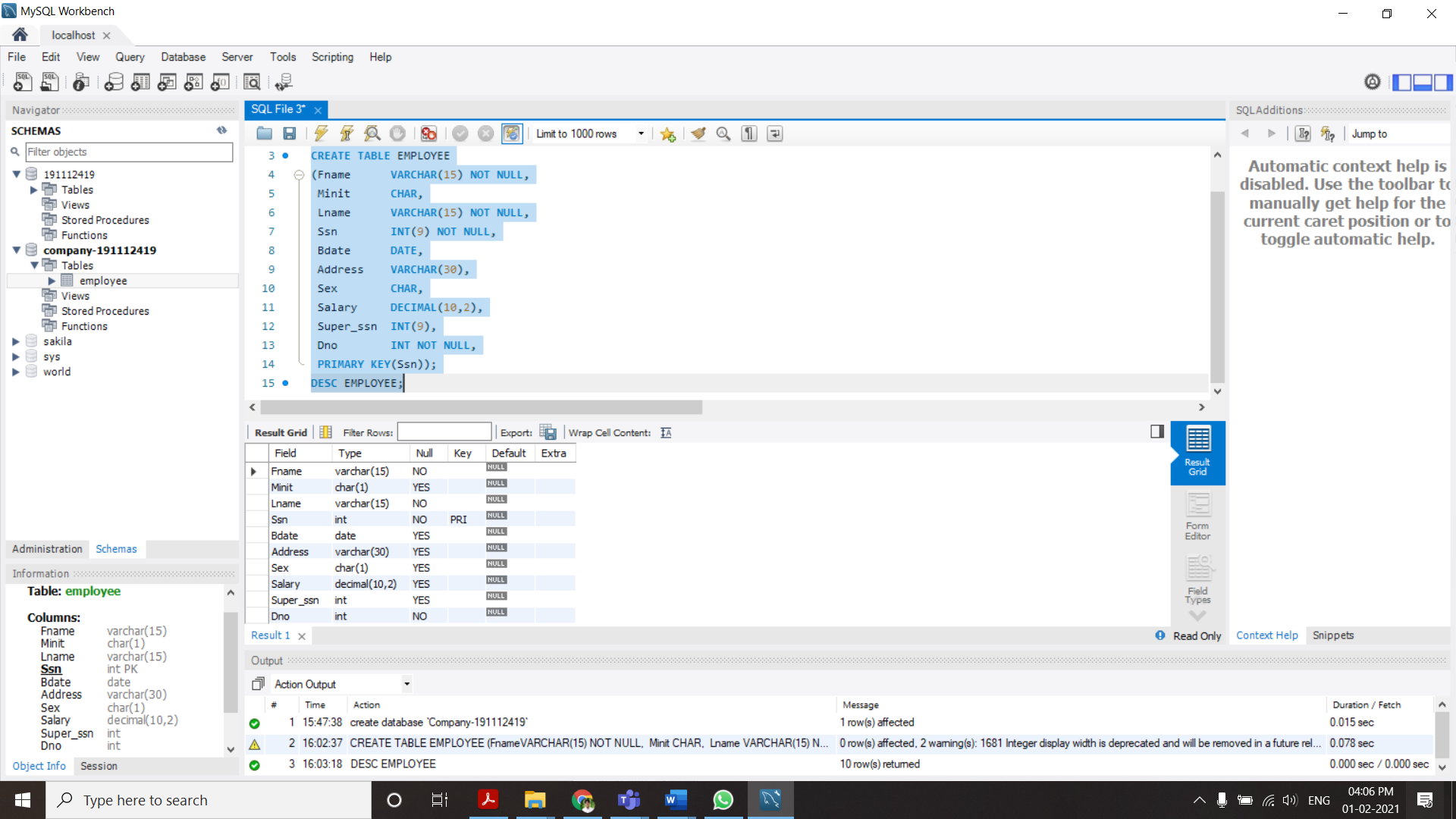


**Solution:**

Created database Company-191112419 :-



EMPLOYEE TABLE:



DEPARTMENT TABLE:

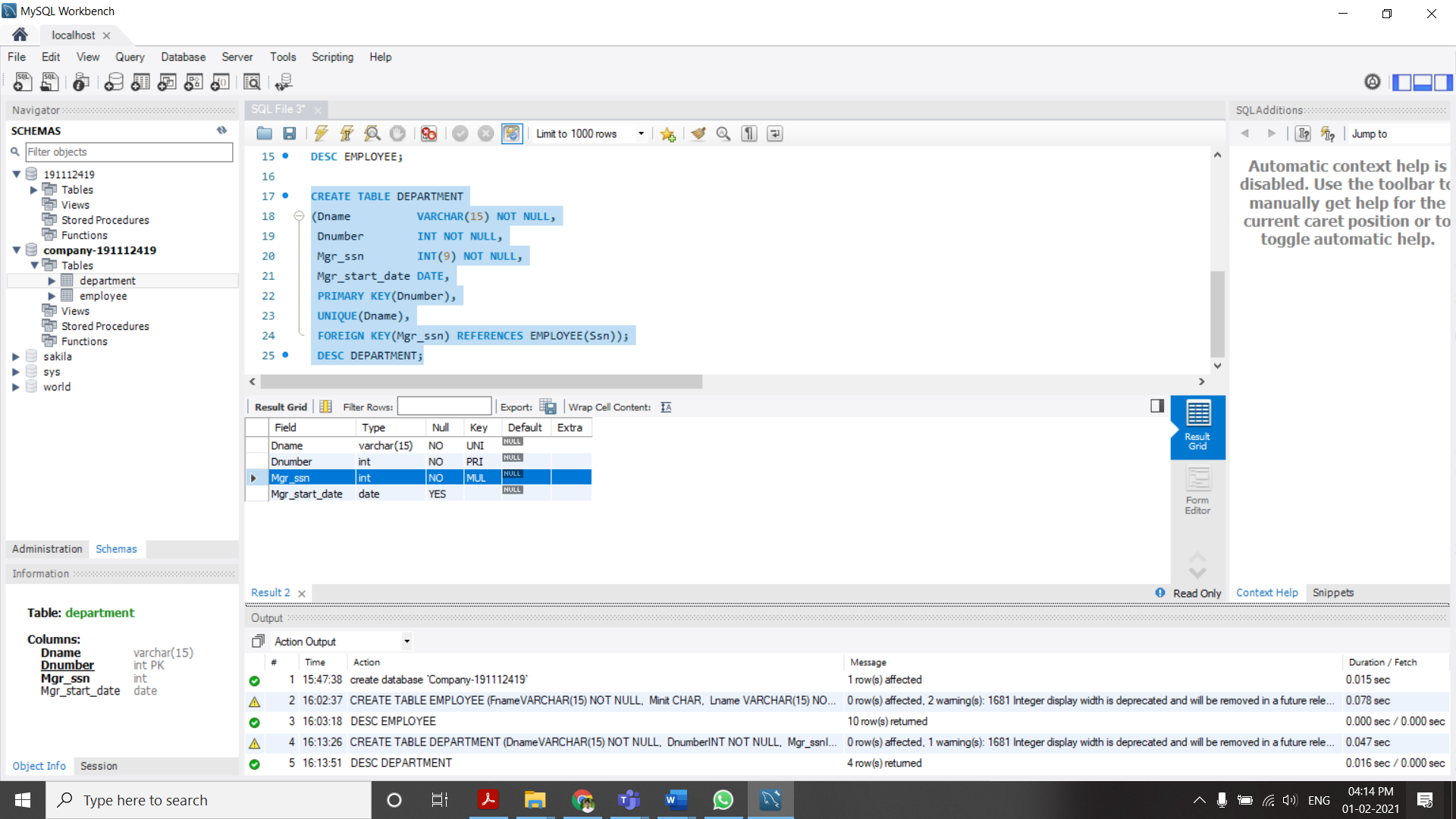


TABLE DEPT\_LOCATIONS

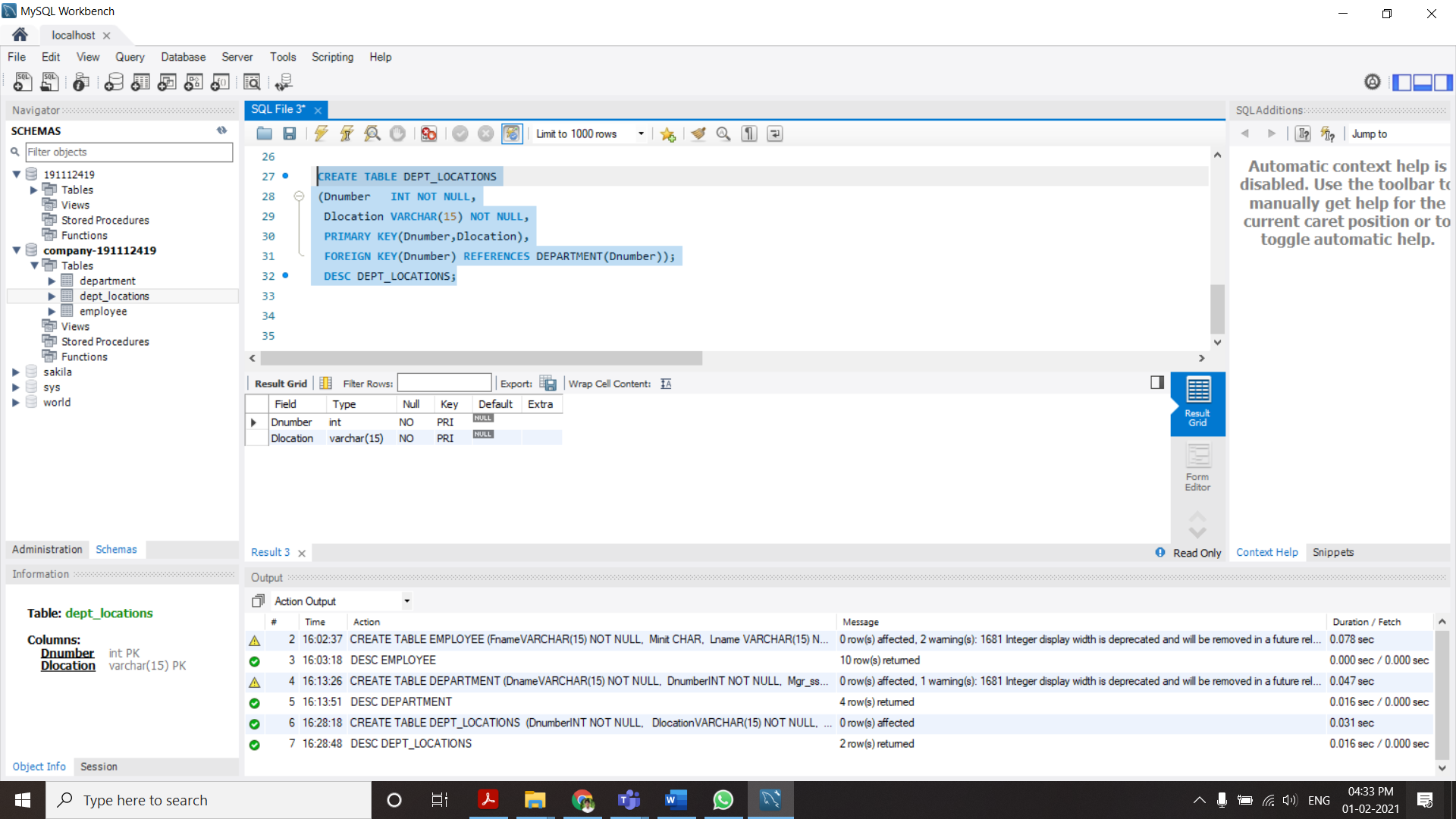


TABLE PROJECT

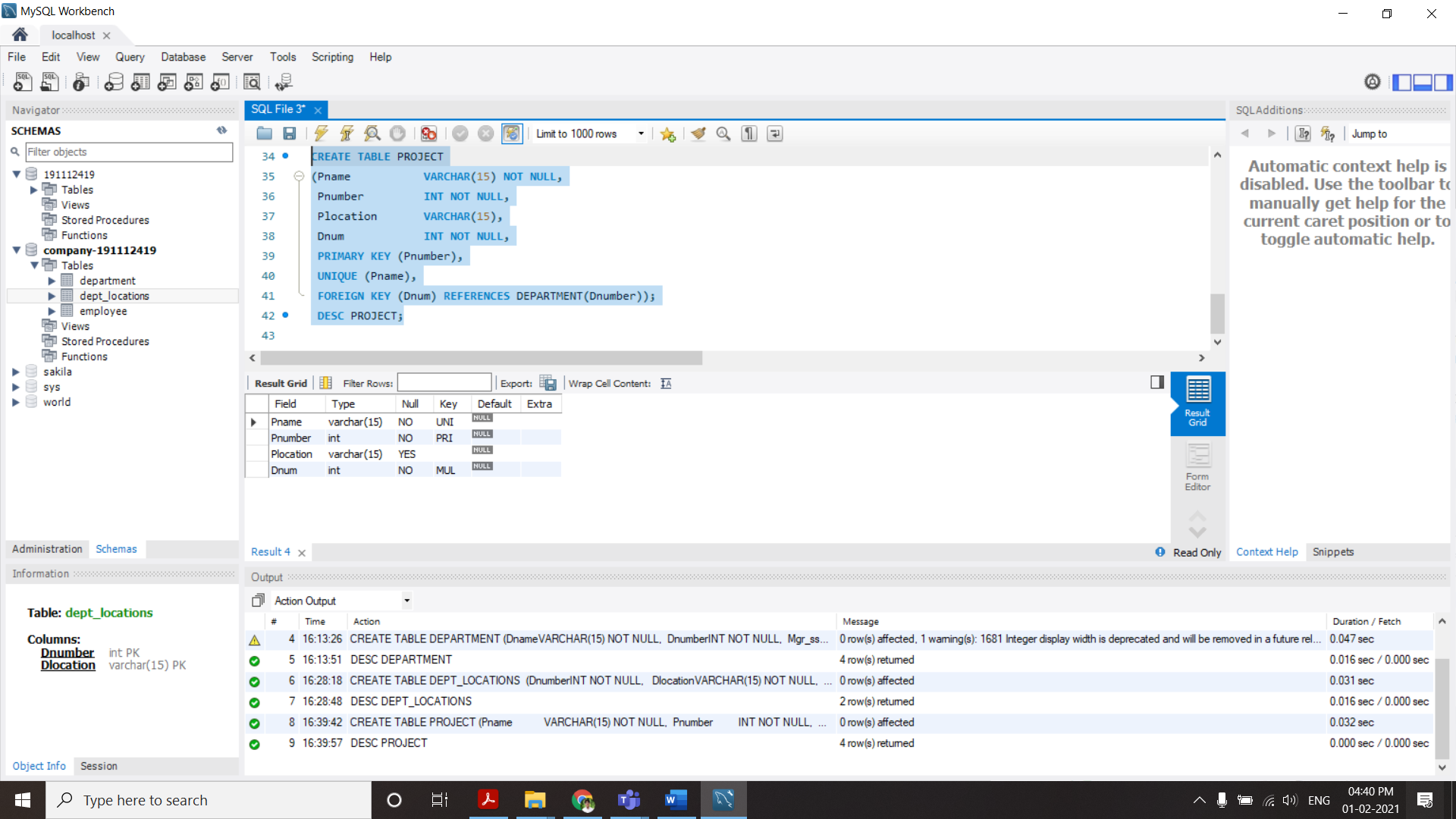


TABLE WORKS\_ON

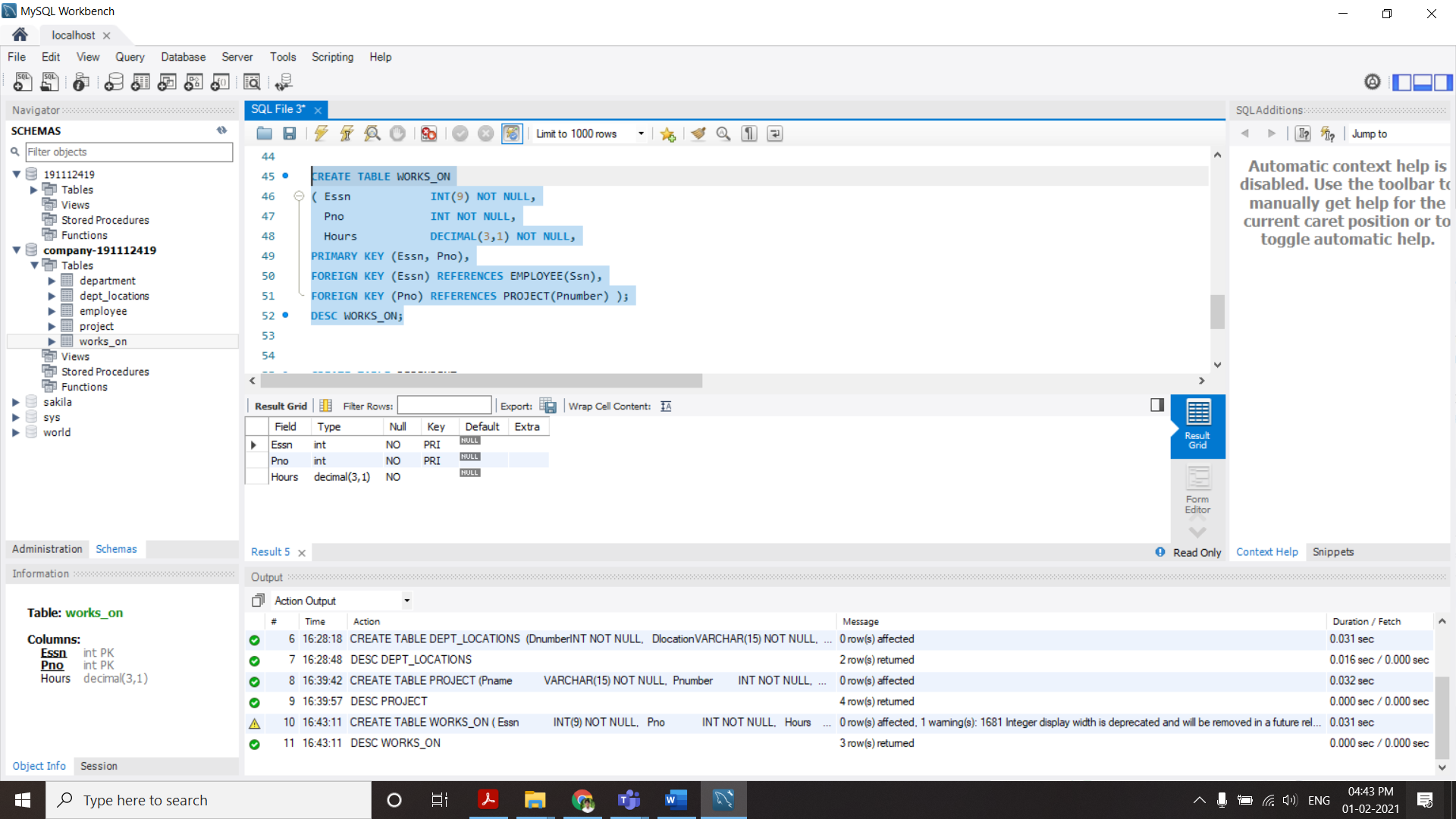
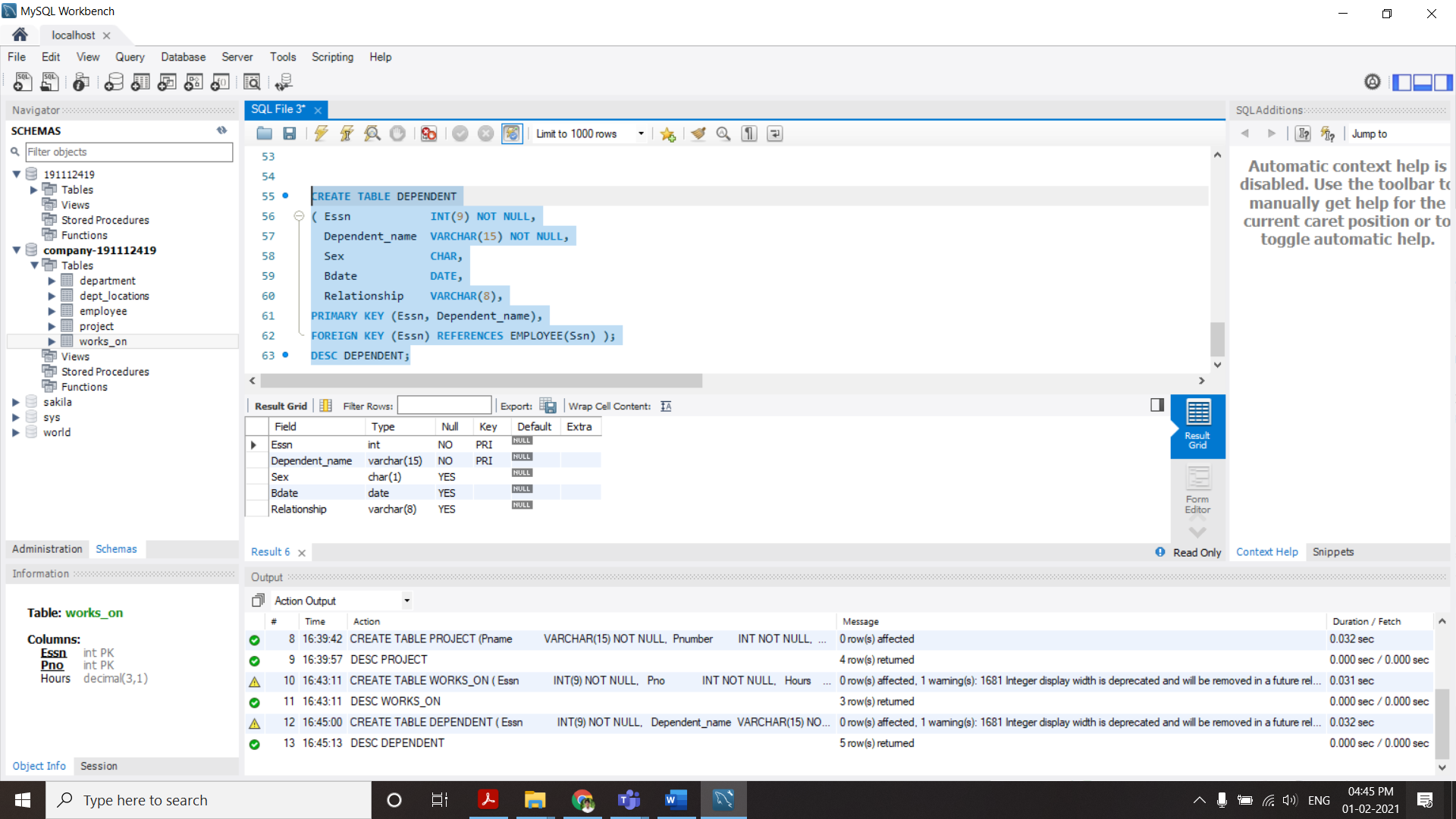
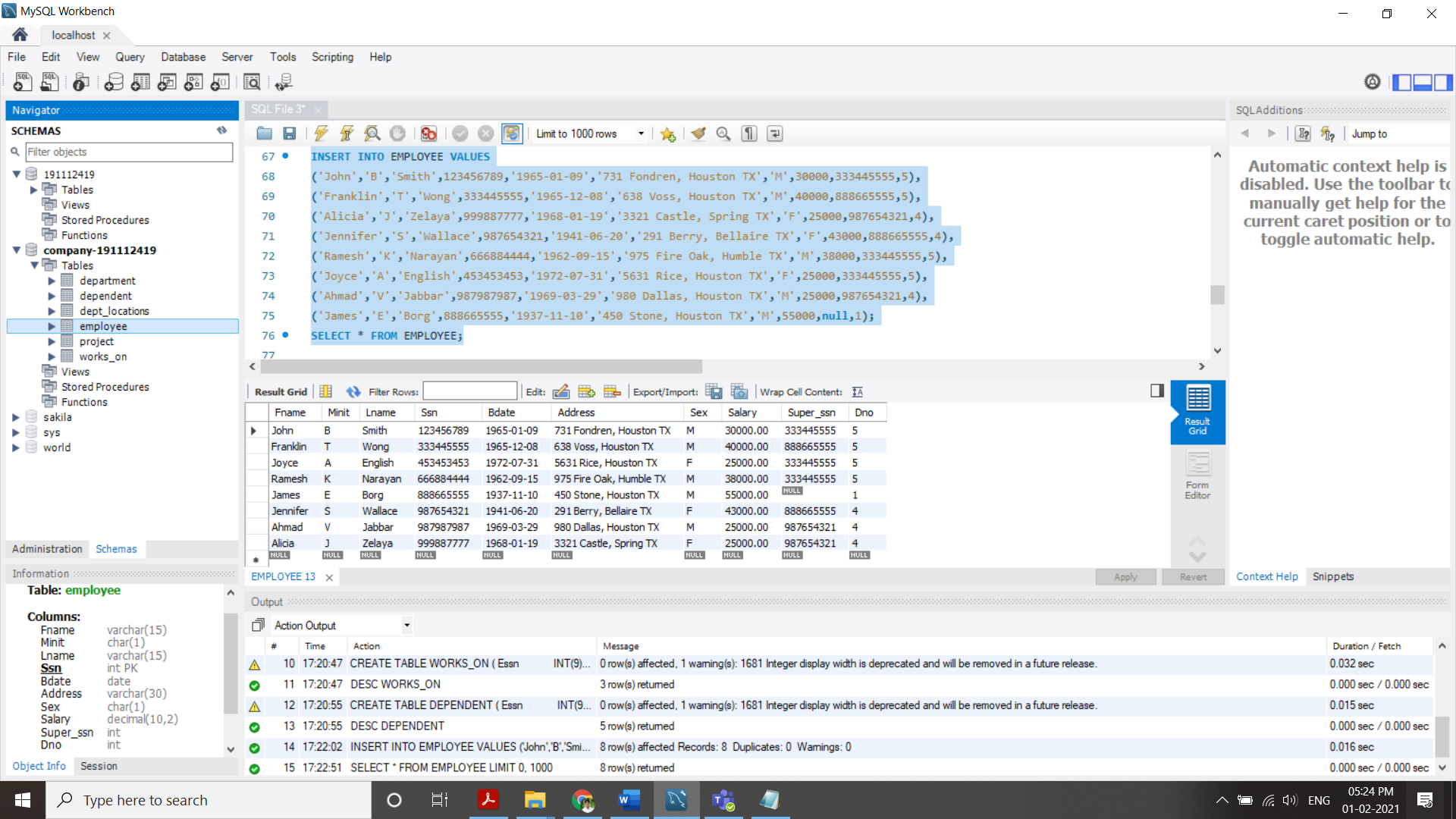


TABLE DEPENDENT

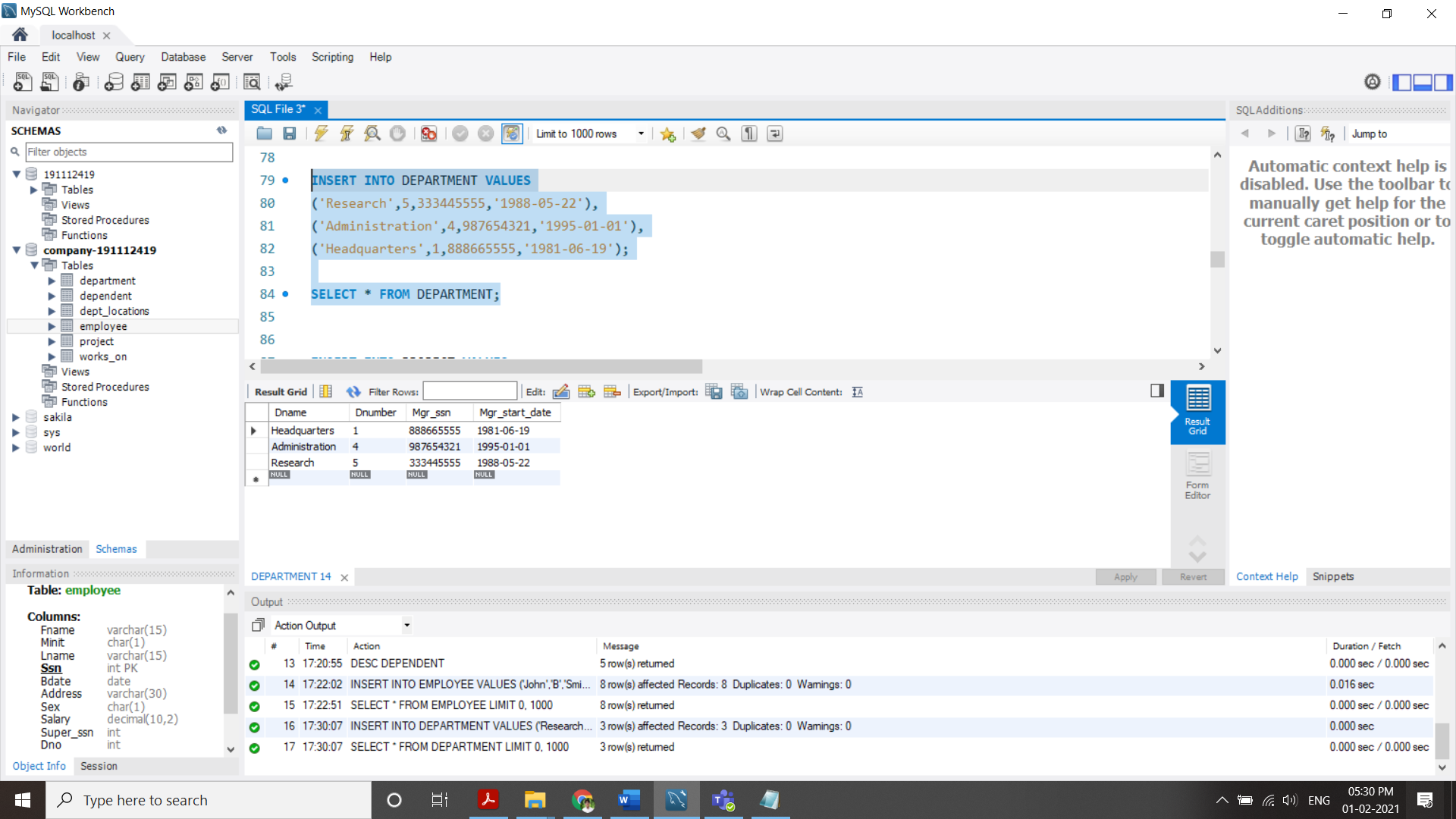


**Inserting data in tables:-**

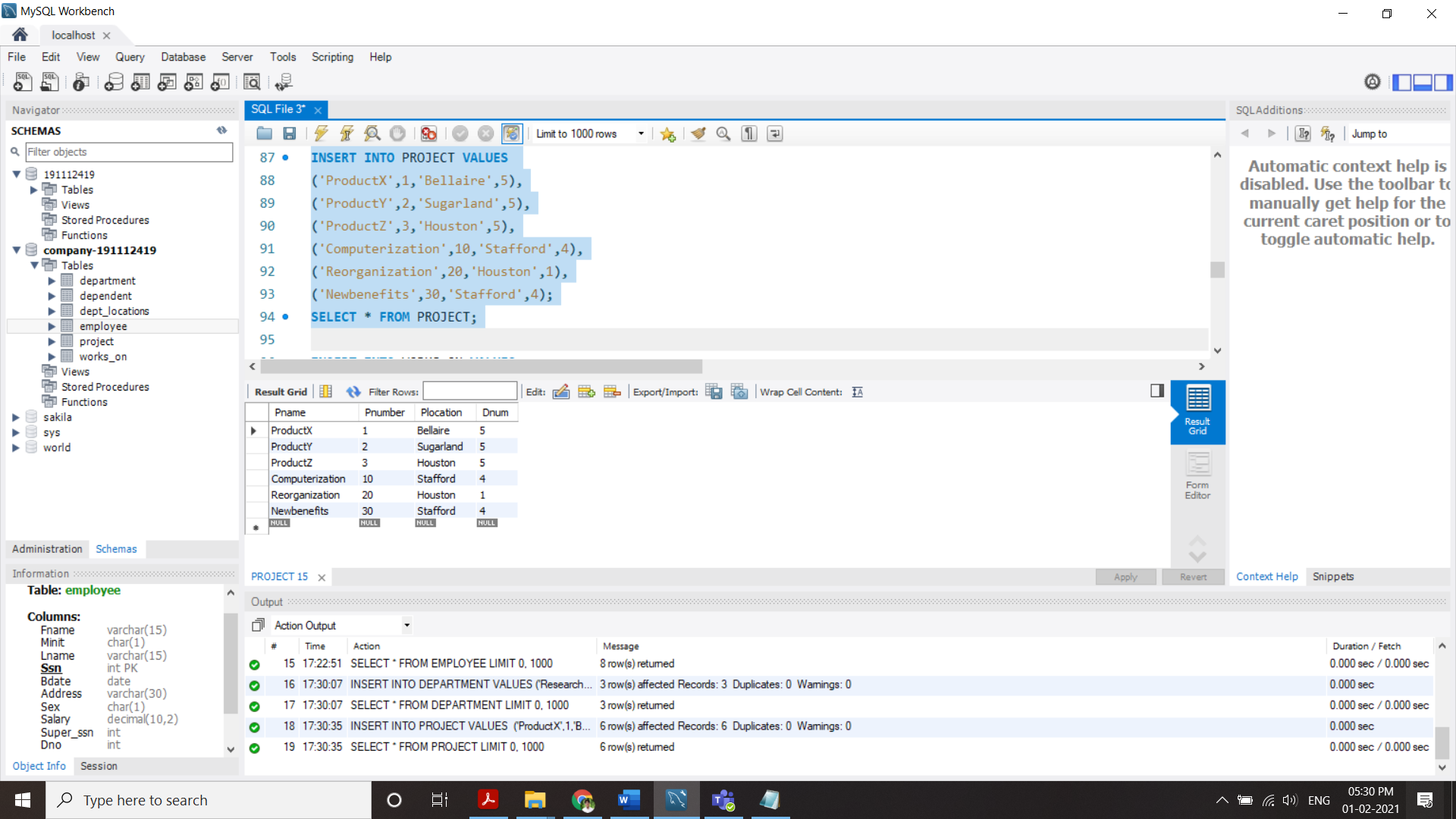
Inserting employee table data



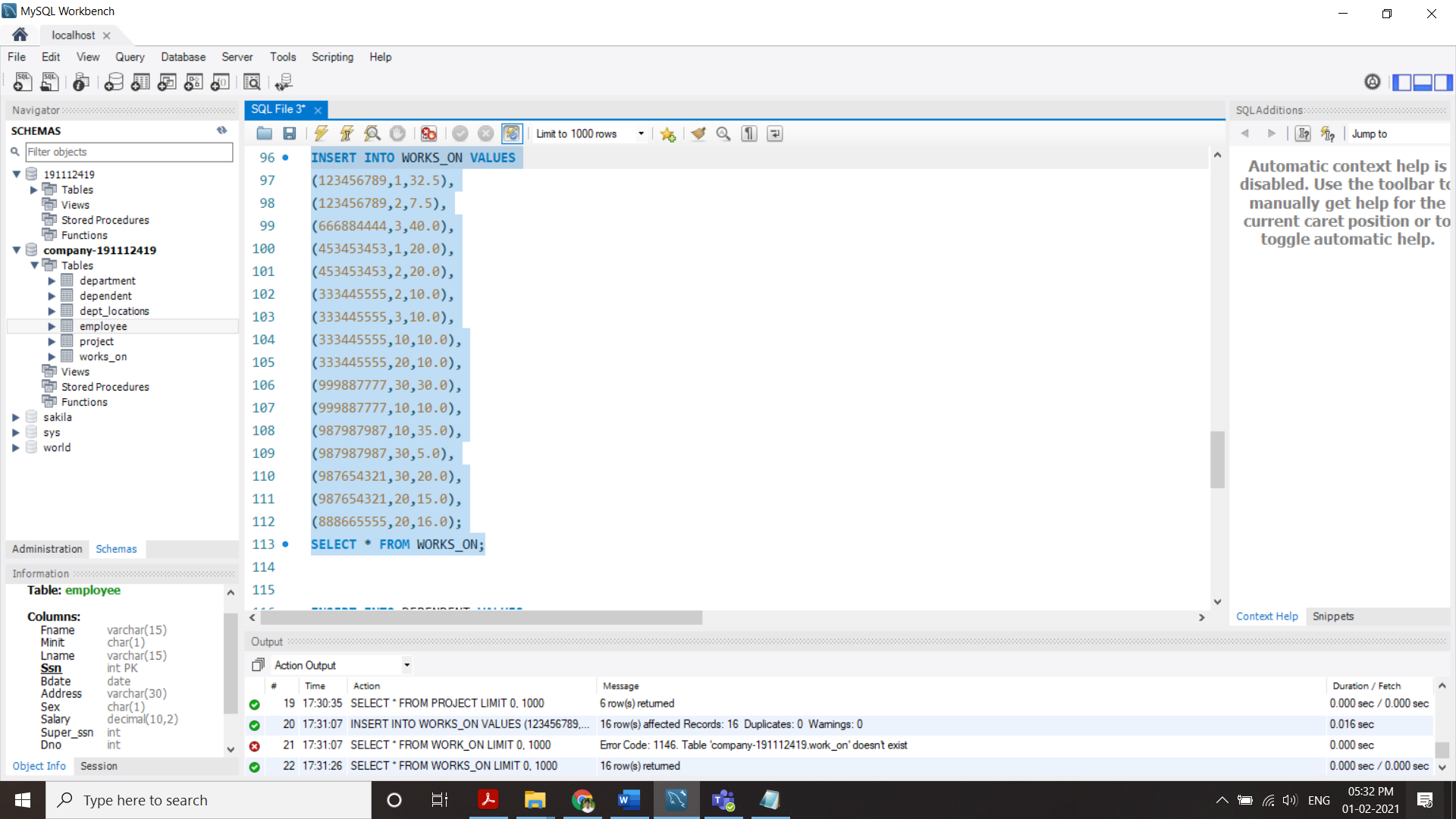
Inserting Department table data

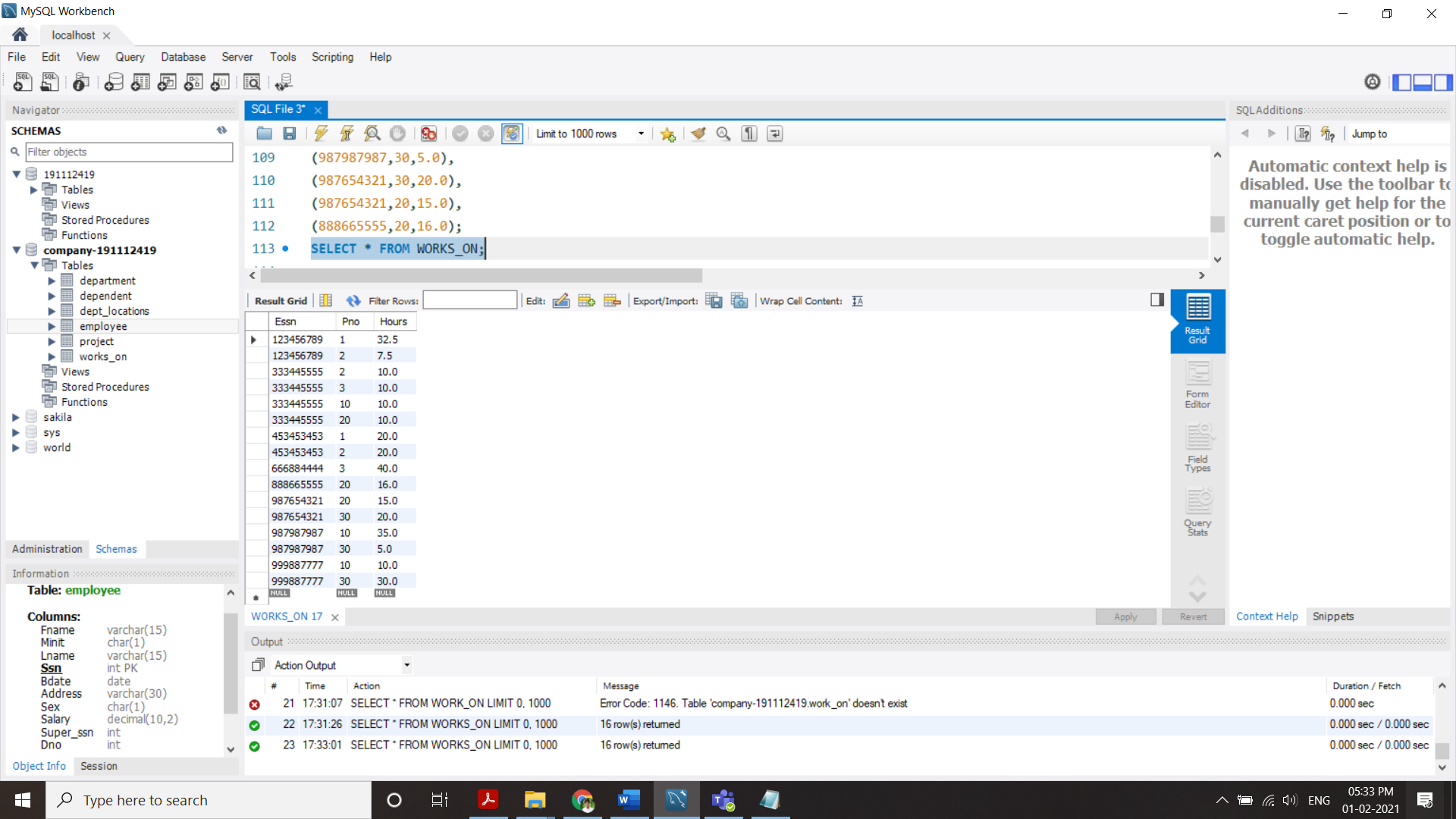


Inserting Project table data

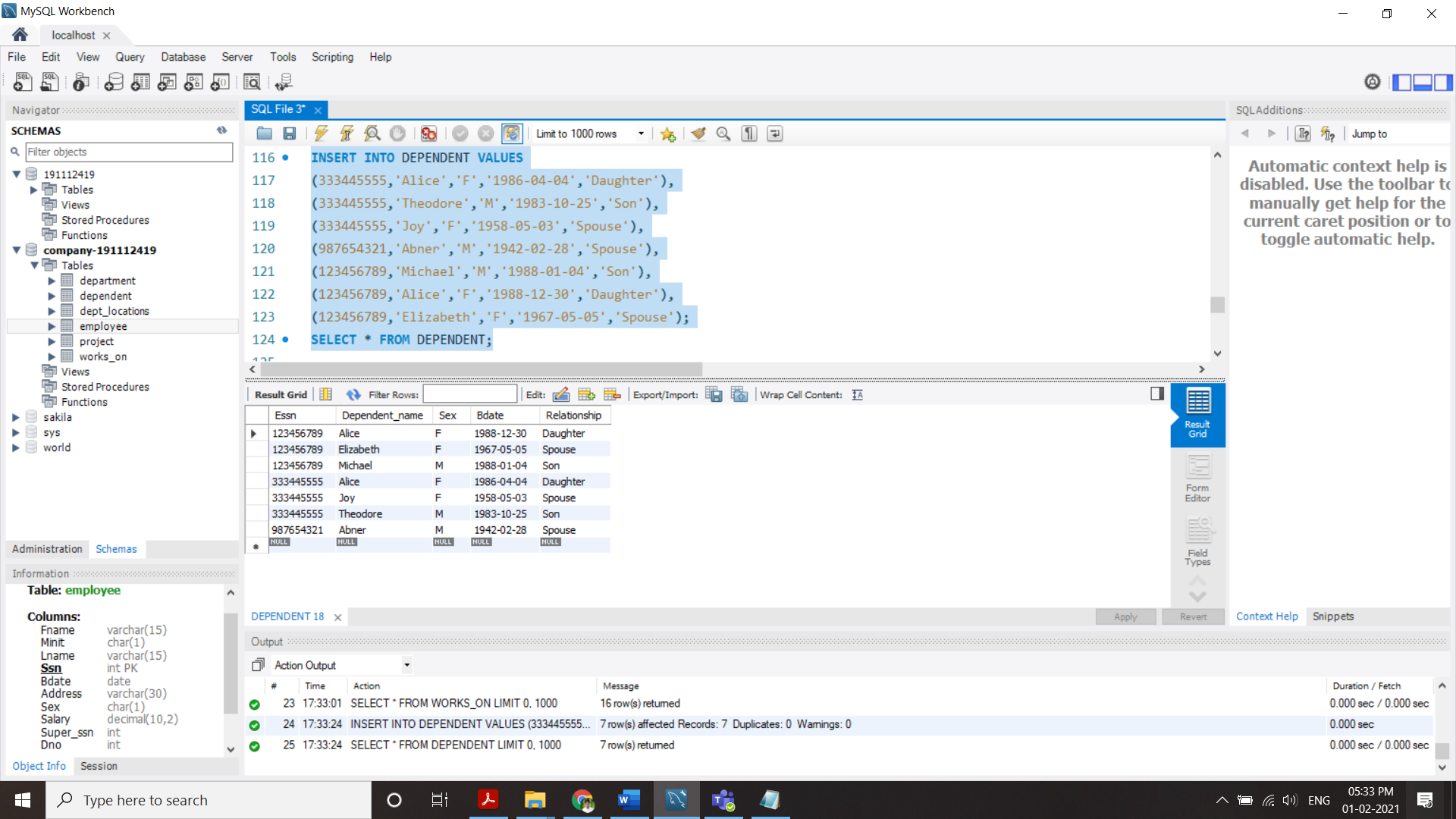


Inserting Works\_on table data

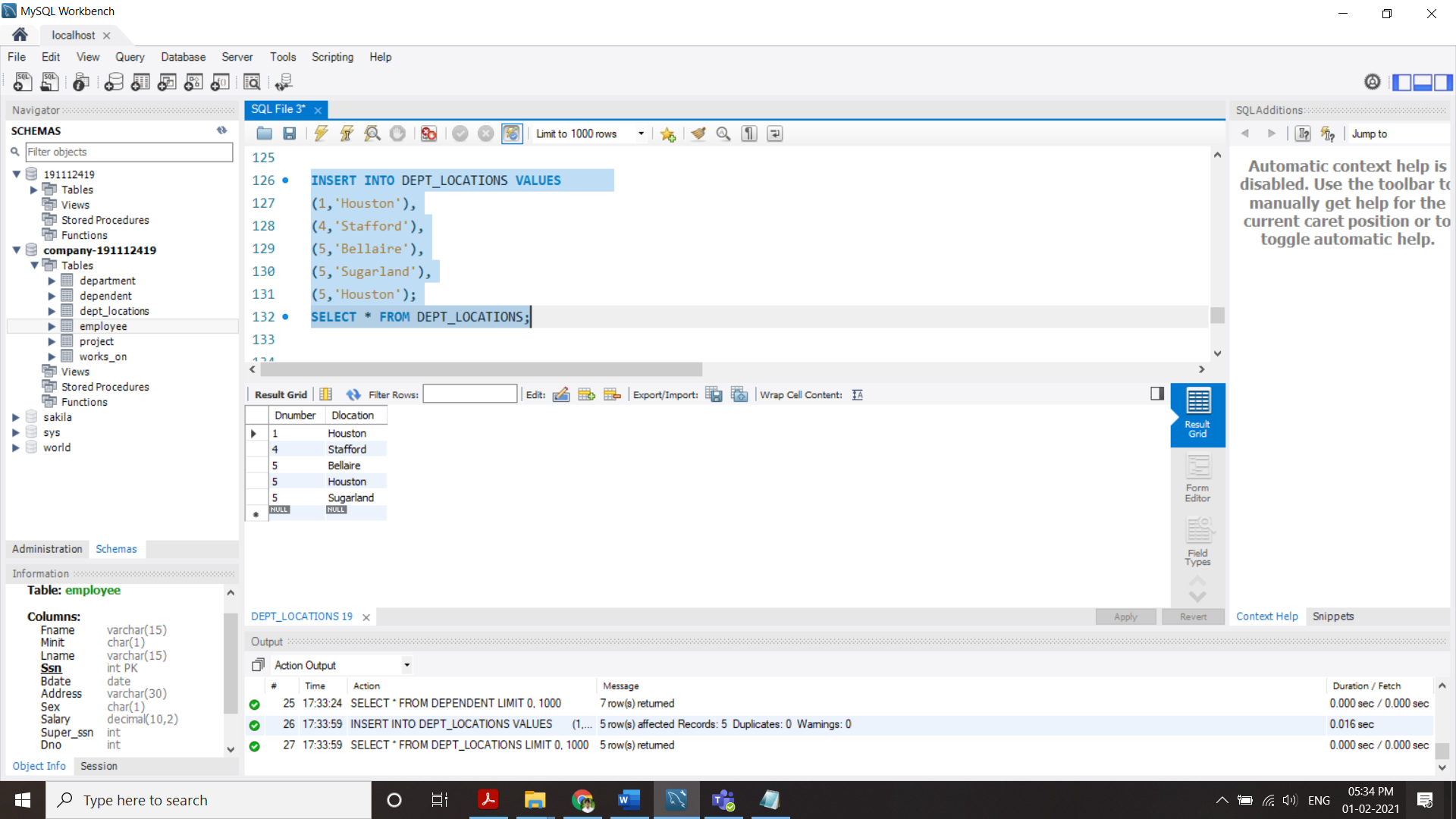




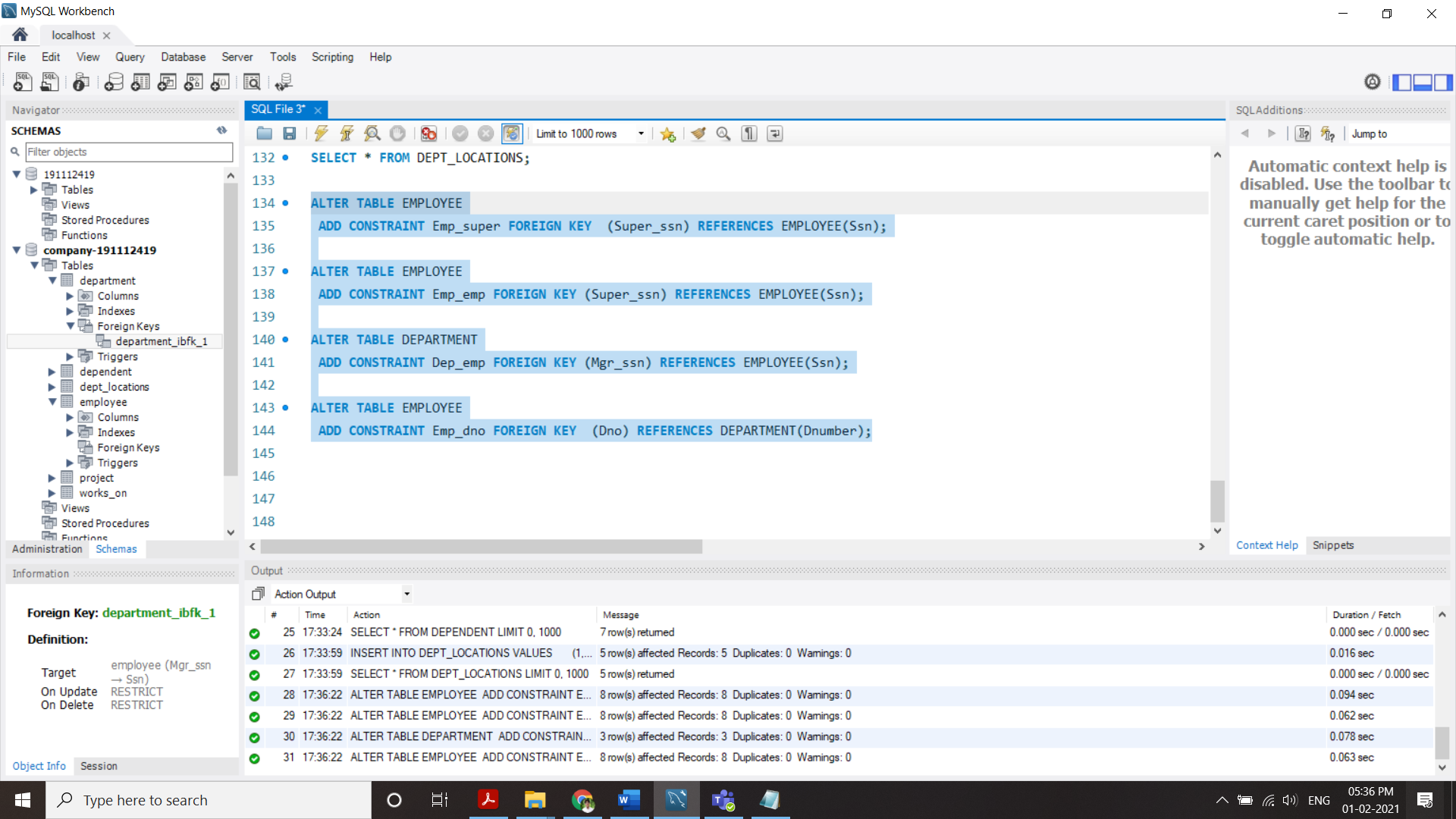
Inserting Dependent table data

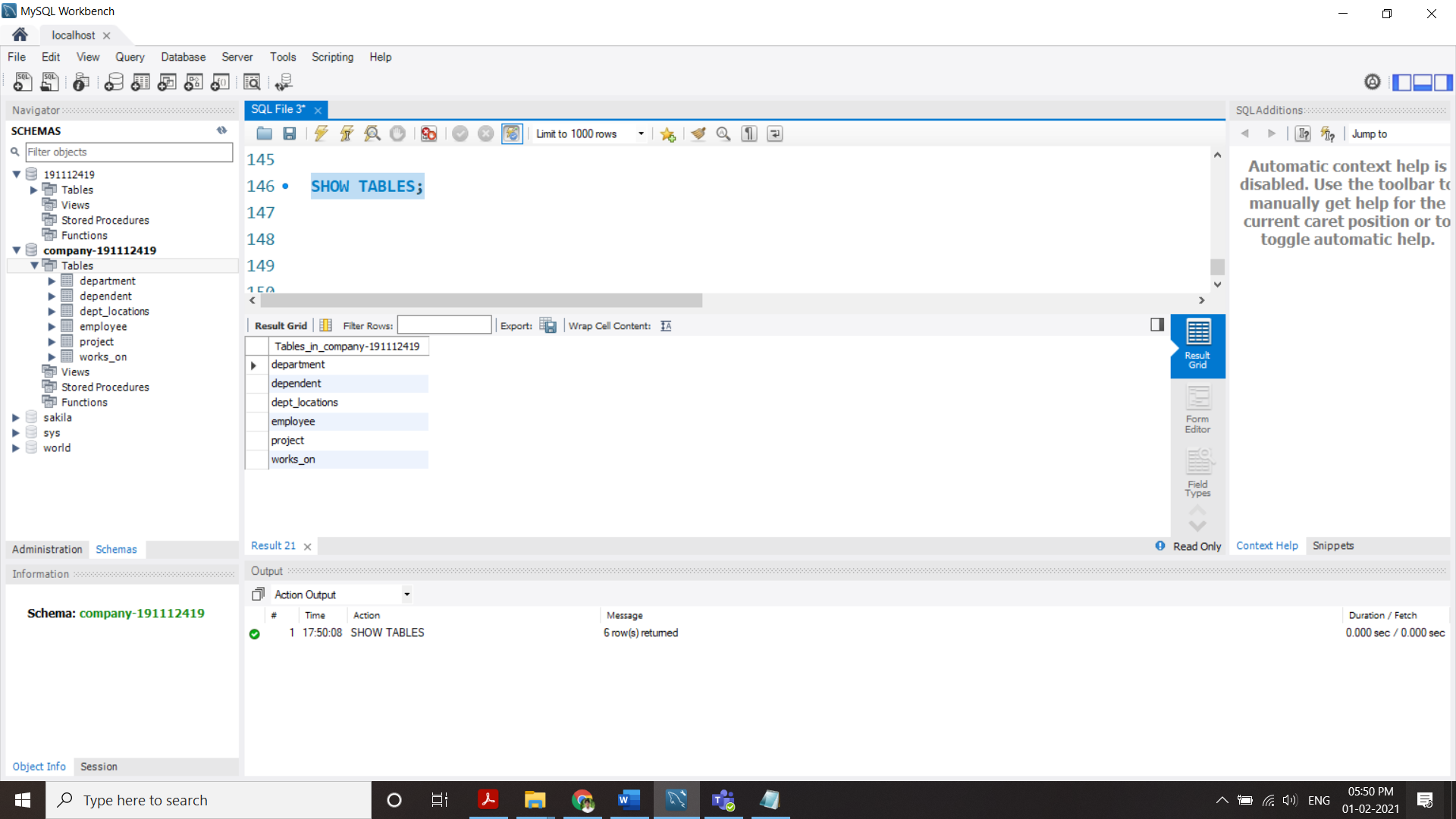


Inserting Dept\_locations table data



Adding foreign key in employee table





All MySQL commands:

create database `Company-191112419`;

CREATE TABLE EMPLOYEE

(Fname VARCHAR(15) NOT NULL,

Minit CHAR,

Lname VARCHAR(15) NOT NULL,

Ssn INT(9) NOT NULL,

Bdate DATE,

Address VARCHAR(30),

Sex CHAR,

Salary DECIMAL(10,2),

Super\_ssn INT(9),

Dno INT NOT NULL,

PRIMARY KEY(Ssn));

DESC EMPLOYEE;

CREATE TABLE DEPARTMENT

(Dname VARCHAR(15) NOT NULL,

Dnumber INT NOT NULL,

Mgr\_ssn INT(9) NOT NULL,

Mgr\_start\_date DATE,

PRIMARY KEY(Dnumber),

UNIQUE(Dname),

FOREIGN KEY(Mgr\_ssn) REFERENCES EMPLOYEE(Ssn));

DESC DEPARTMENT;

CREATE TABLE DEPT\_LOCATIONS

(Dnumber INT NOT NULL,

Dlocation VARCHAR(15) NOT NULL,

PRIMARY KEY(Dnumber,Dlocation),

FOREIGN KEY(Dnumber) REFERENCES DEPARTMENT(Dnumber));

DESC DEPT\_LOCATIONS;

CREATE TABLE PROJECT

(Pname VARCHAR(15) NOT NULL,

Pnumber INT NOT NULL,

Plocation VARCHAR(15),

Dnum INT NOT NULL,

PRIMARY KEY (Pnumber),

UNIQUE (Pname),

FOREIGN KEY (Dnum) REFERENCES DEPARTMENT(Dnumber));

DESC PROJECT;

CREATE TABLE WORKS\_ON

( Essn INT(9) NOT NULL,

Pno INT NOT NULL,

Hours DECIMAL(3,1) NOT NULL,

PRIMARY KEY (Essn, Pno),

FOREIGN KEY (Essn) REFERENCES EMPLOYEE(Ssn),

FOREIGN KEY (Pno) REFERENCES PROJECT(Pnumber) );

DESC WORKS\_ON;

CREATE TABLE DEPENDENT

( Essn INT(9) NOT NULL,

Dependent\_name VARCHAR(15) NOT NULL,

Sex CHAR,

Bdate DATE,

Relationship VARCHAR(8),

PRIMARY KEY (Essn, Dependent\_name),

FOREIGN KEY (Essn) REFERENCES EMPLOYEE(Ssn) );

DESC DEPENDENT;

INSERT INTO EMPLOYEE VALUES

('John','B','Smith',123456789,'1965-01-09','731 Fondren, Houston TX','M',30000,333445555,5),

('Franklin','T','Wong',333445555,'1965-12-08','638 Voss, Houston TX','M',40000,888665555,5),

('Alicia','J','Zelaya',999887777,'1968-01-19','3321 Castle, Spring TX','F',25000,987654321,4),

('Jennifer','S','Wallace',987654321,'1941-06-20','291 Berry, Bellaire TX','F',43000,888665555,4),

('Ramesh','K','Narayan',666884444,'1962-09-15','975 Fire Oak, Humble TX','M',38000,333445555,5),

('Joyce','A','English',453453453,'1972-07-31','5631 Rice, Houston TX','F',25000,333445555,5),

('Ahmad','V','Jabbar',987987987,'1969-03-29','980 Dallas, Houston TX','M',25000,987654321,4),

('James','E','Borg',888665555,'1937-11-10','450 Stone, Houston TX','M',55000,null,1);

SELECT \* FROM EMPLOYEE;

INSERT INTO DEPARTMENT VALUES

('Research',5,333445555,'1988-05-22'),

('Administration',4,987654321,'1995-01-01'),

('Headquarters',1,888665555,'1981-06-19');

SELECT \* FROM DEPARTMENT;

INSERT INTO PROJECT VALUES

('ProductX',1,'Bellaire',5),

('ProductY',2,'Sugarland',5),

('ProductZ',3,'Houston',5),

('Computerization',10,'Stafford',4),

('Reorganization',20,'Houston',1),

('Newbenefits',30,'Stafford',4);

SELECT \* FROM PROJECT;

INSERT INTO WORKS\_ON VALUES

(123456789,1,32.5),

(123456789,2,7.5),

(666884444,3,40.0),

(453453453,1,20.0),

(453453453,2,20.0),

(333445555,2,10.0),

(333445555,3,10.0),

(333445555,10,10.0),

(333445555,20,10.0),

(999887777,30,30.0),

(999887777,10,10.0),

(987987987,10,35.0),

(987987987,30,5.0),

(987654321,30,20.0),

(987654321,20,15.0),

(888665555,20,16.0);

SELECT \* FROM WORKS\_ON;

INSERT INTO DEPENDENT VALUES

(333445555,'Alice','F','1986-04-04','Daughter'),

(333445555,'Theodore','M','1983-10-25','Son'),

(333445555,'Joy','F','1958-05-03','Spouse'),

(987654321,'Abner','M','1942-02-28','Spouse'),

(123456789,'Michael','M','1988-01-04','Son'),

(123456789,'Alice','F','1988-12-30','Daughter'),

(123456789,'Elizabeth','F','1967-05-05','Spouse');

SELECT \* FROM DEPENDENT;

INSERT INTO DEPT\_LOCATIONS VALUES

(1,'Houston'),

(4,'Stafford'),

(5,'Bellaire'),

(5,'Sugarland'),

(5,'Houston');

SELECT \* FROM DEPT\_LOCATIONS;

ALTER TABLE EMPLOYEE

ADD CONSTRAINT Emp\_super FOREIGN KEY (Super\_ssn) REFERENCES EMPLOYEE(Ssn);

ALTER TABLE EMPLOYEE

ADD CONSTRAINT Emp\_emp FOREIGN KEY (Super\_ssn) REFERENCES EMPLOYEE(Ssn);

ALTER TABLE DEPARTMENT

ADD CONSTRAINT Dep\_emp FOREIGN KEY (Mgr\_ssn) REFERENCES EMPLOYEE(Ssn);

ALTER TABLE EMPLOYEE

ADD CONSTRAINT Emp\_dno FOREIGN KEY (Dno) REFERENCES DEPARTMENT(Dnumber);

SHOW TABLES;