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| Micah Schultz |
| GCHCC Database |
| Database Project |

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| Micah Schultz  CSIS 327-B01 LUO  Database Project  March 12th, 2017 |

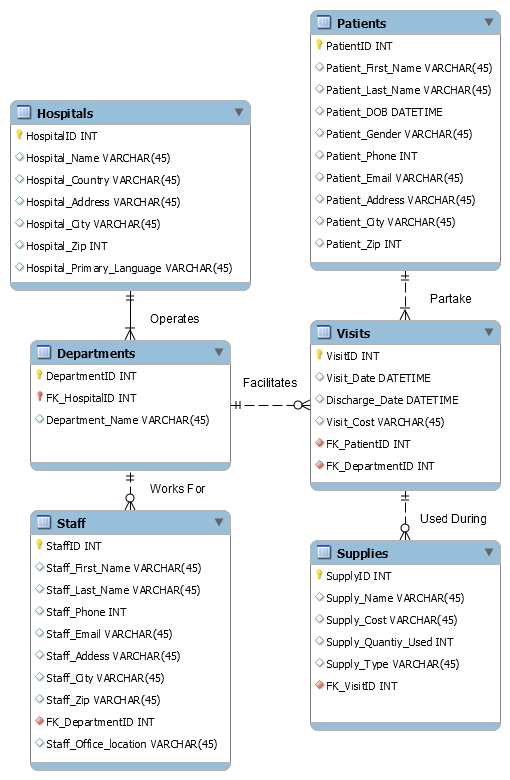
**Problem Statement and Executive Summary**

God Cares Hospital for Catholic Converts or GCHCC is a charitable organization that operates many missionary hospitals around the globe. As GCHCC has grown, the organization has outgrown its original database system. The purpose of this project is to develop a database that will help GCHCC maintain its efforts and enhance their ability to manage and analyze critical data. The database will have the ability to manage hospitals facilities, department information, staff and patent records, and visits information.

The database that is to be developed will be required to solve the problems of managing the recording the operations of GCHCC facilities is such a many that will not limit future growth. To achieve this, special care has been given to develop a database structure that is efficient and easy to query. The database contained in this preliminary report is only designed to provide a basic framework, so that GCHCC can provide input on what elements to changed and expanded. The database is also constructed in such a manner that it can be easily expanded, as GCHCC is looking to expand its operation and desires easy expansion of management systems.

GCHCC is looking to expand its operation to several new facilities in a multiple countries. With this new database system, GCHCC will be able to effective spread the love of God though the medical services they provide. Medical care show the love of God by offer help to those that need it most. This database will enable GCHCC the continue its work with less resources going to management and more going to care.

**Database Table Design**



**Database Table Implementation**

CREATE TABLE Hospitals

(HospitalID INT CONSTRAINT HospitalID\_PK PRIMARY KEY,

Hospital\_Name VARCHAR(45) NOT NULL,

Hospital\_Country VARCHAR(45) NOT NULL,

Hospital\_Address VARCHAR(45),

Hospital\_City VARCHAR(45),

Hospital\_Zip INT,

Hospital\_Primary\_Language VARCHAR(45));

CREATE TABLE Departments

(DepartmentID INT UNIQUE NOT NULL,

FK\_HospitalID INT NOT NULL,

Department\_Name VARCHAR(45) NOT NULL,

CONSTRAINT Composit\_PK PRIMARY KEY (DepartmentID,FK\_HospitalID),

CONSTRAINT fk\_Departments\_Hospitals1 FOREIGN KEY

(FK\_HospitalID) REFERENCES Hospitals (HospitalID));

CREATE TABLE Staff

(StaffID INT CONSTRAINT StaffID\_PK PRIMARY KEY,

Staff\_First\_Name VARCHAR(45) NOT NULL,

Staff\_Last\_Name VARCHAR(45) NOT NULL,

Staff\_Phone INT,

Staff\_Email VARCHAR(45),

Staff\_Addess VARCHAR(45),

Staff\_City VARCHAR(45),

Staff\_Zip VARCHAR(45),

FK\_DepartmentID INT NOT NULL,

Staff\_Office\_location VARCHAR(45),

CONSTRAINT fk\_Staff\_Departments FOREIGN KEY

(FK\_DepartmentID) REFERENCES Departments (DepartmentID));

CREATE TABLE Patients

(PatientID INT CONSTRAINT PatientID\_PK PRIMARY KEY,

Patient\_First\_Name VARCHAR(45) NOT NULL,

Patient\_Last\_Name VARCHAR(45) NOT NULL,

Patient\_DOB TIMESTAMP ,

Patient\_Gender VARCHAR(45) NOT NULL,

Patient\_Phone INT,

Patient\_Email VARCHAR(45),

Patient\_Address VARCHAR(45),

Patient\_City VARCHAR(45),

Patient\_Zip INT);

CREATE TABLE Visits

(VisitID INT CONSTRAINT VisitID\_PK PRIMARY KEY,

Visit\_Date TIMESTAMP NOT NULL,

Visit\_Discharge\_Date TIMESTAMP,

Visit\_Cost VARCHAR(45),

FK\_PatientID INT NOT NULL,

FK\_DepartmentID INT NOT NULL,

CONSTRAINT fk\_Visits\_Patients1 FOREIGN KEY

(FK\_PatientID) REFERENCES Patients (PatientID),

CONSTRAINT fk\_Visits\_Departments1 FOREIGN KEY

(FK\_DepartmentID) REFERENCES Departments (DepartmentID));

CREATE TABLE Supplies

(SupplyID INT CONSTRAINT SupplyID\_PK PRIMARY KEY,

Supply\_Name VARCHAR(45) NOT NULL,

Supply\_Cost VARCHAR(45),

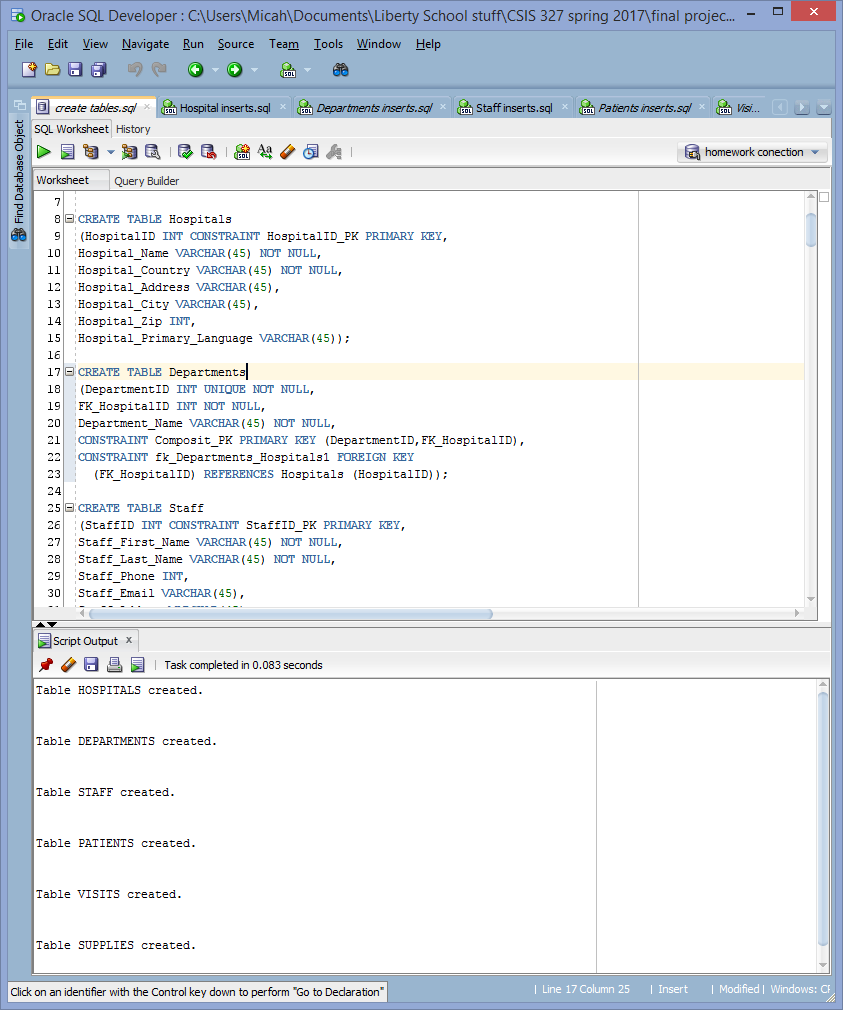
Supply\_Quantiy\_Used INT,

Supply\_Type VARCHAR(45),

FK\_VisitID INT NOT NULL,

CONSTRAINT fk\_Supplies\_Visits FOREIGN KEY

(FK\_VisitID) REFERENCES Visits (VisitID));



**Database Table Population**

INSERT INTO Hospitals (HospitalID, Hospital\_Name, Hospital\_Country, Hospital\_Address, Hospital\_City, Hospital\_Zip, Hospital\_Primary\_Language)

VALUES (1000, 'Magic Medicine','USA', '123 Awesome St', 'Accident', 21520, 'English');

INSERT INTO Hospitals (HospitalID, Hospital\_Name, Hospital\_Country, Hospital\_Address, Hospital\_City, Hospital\_Zip, Hospital\_Primary\_Language)

VALUES (1001, 'Happy Healthy','USA', '42 Second St', 'Dogtown', 35068, 'English');

INSERT INTO Hospitals (HospitalID, Hospital\_Name, Hospital\_Country, Hospital\_Address, Hospital\_City, Hospital\_Zip, Hospital\_Primary\_Language)

VALUES (1002, 'Brave', 'USA', '564 Hospital St','Fearnot', 17968, 'English');

INSERT INTO Hospitals (HospitalID, Hospital\_Name, Hospital\_Country, Hospital\_Address, Hospital\_City, Hospital\_Zip, Hospital\_Primary\_Language)

VALUES (1003, '1st OutReachMD','Mongolia', '1 First st', 'Moron', '', 'Mongolian');

INSERT INTO Hospitals (HospitalID, Hospital\_Name, Hospital\_Country, Hospital\_Address, Hospital\_City, Hospital\_Zip, Hospital\_Primary\_Language)

VALUES (1004, 'Serious Care','Belgium', '66 Stern Dr', 'Silly', 7830, 'Dutch');

INSERT INTO Hospitals (HospitalID, Hospital\_Name, Hospital\_Country, Hospital\_Address, Hospital\_City, Hospital\_Zip, Hospital\_Primary\_Language)

VALUES (1005, 'Supper Meidical','Turkey', '5649 Hero St', 'Batman', 72000, 'Turkish');

INSERT INTO Hospitals (HospitalID, Hospital\_Name, Hospital\_Country, Hospital\_Address, Hospital\_City, Hospital\_Zip, Hospital\_Primary\_Language)

VALUES (1006, 'Mediocer Medicine','USA', '123 LetDown St', 'Accident', 21520, 'English');

INSERT INTO Hospitals (HospitalID, Hospital\_Name, Hospital\_Country, Hospital\_Address, Hospital\_City, Hospital\_Zip, Hospital\_Primary\_Language)

VALUES (1007, 'Crucial Compashion','Uganda', '646 third St', 'Kampala', '', 'English');

INSERT INTO Hospitals (HospitalID, Hospital\_Name, Hospital\_Country, Hospital\_Address, Hospital\_City, Hospital\_Zip, Hospital\_Primary\_Language)

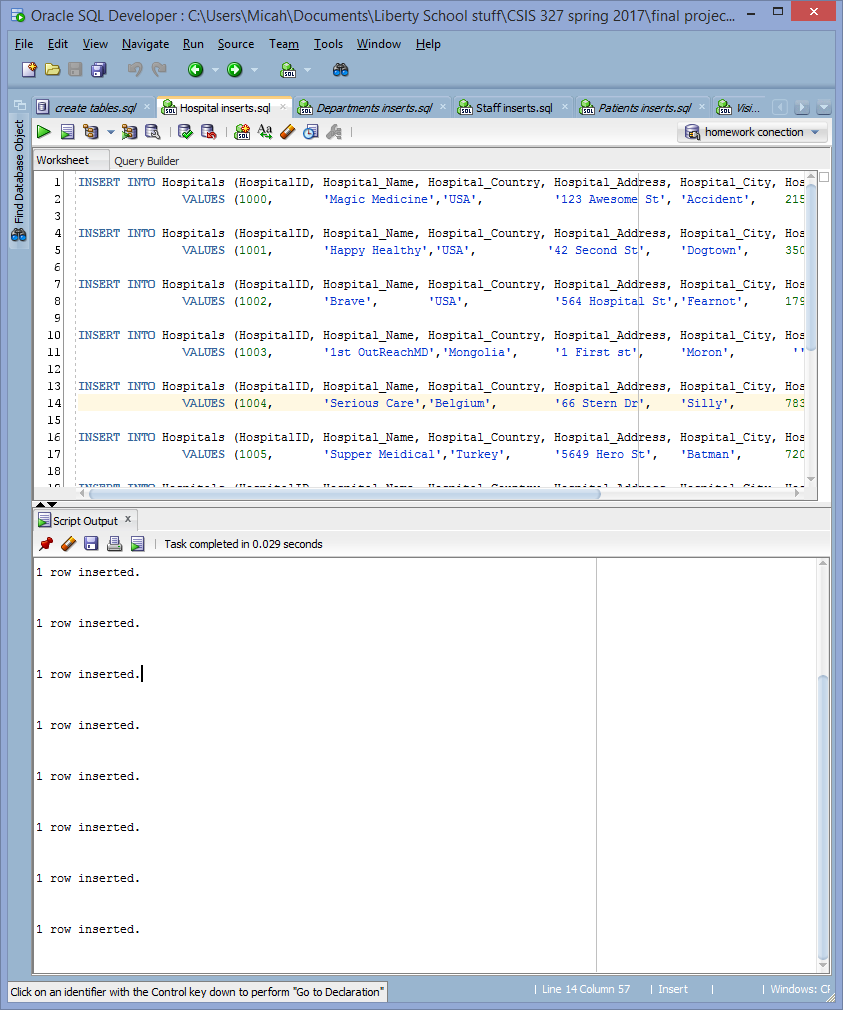
VALUES (1008,'Wyoming County Community Health System','USA','400 N Main St','Warsaw', 14569, 'English');

INSERT INTO Hospitals (HospitalID, Hospital\_Name, Hospital\_Country, Hospital\_Address, Hospital\_City, Hospital\_Zip, Hospital\_Primary\_Language)

VALUES (1009, '9th OutReachMD','Nepal', '1 First st', 'Kathmandu', '', 'Nepali');

INSERT INTO Hospitals (HospitalID, Hospital\_Name, Hospital\_Country, Hospital\_Address, Hospital\_City, Hospital\_Zip, Hospital\_Primary\_Language)

VALUES (1010, 'No1 Hospital','kazakhstan ', '66 apple Dr', 'almaty', '', 'kazakh');



INSERT INTO Departments (DepartmentID, FK\_HospitalID, Department\_Name)

VALUES (1000, 1002, 'Professional training center');

INSERT INTO Departments (DepartmentID, FK\_HospitalID, Department\_Name)

VALUES (1001, 1002, 'Marketing ');

INSERT INTO Departments (DepartmentID, FK\_HospitalID, Department\_Name)

VALUES (1002, 1002, 'Pediatric center');

INSERT INTO Departments (DepartmentID, FK\_HospitalID, Department\_Name)

VALUES (1003, 1002, 'Professional training center');

INSERT INTO Departments (DepartmentID, FK\_HospitalID, Department\_Name)

VALUES (1004, 1003, 'Executive administration');

INSERT INTO Departments (DepartmentID, FK\_HospitalID, Department\_Name)

VALUES (1005, 1003, 'Accounting');

INSERT INTO Departments (DepartmentID, FK\_HospitalID, Department\_Name)

VALUES (1006, 1003, 'Critical care');

INSERT INTO Departments (DepartmentID, FK\_HospitalID, Department\_Name)

VALUES (1007, 1004, 'Information systems');

INSERT INTO Departments (DepartmentID, FK\_HospitalID, Department\_Name)

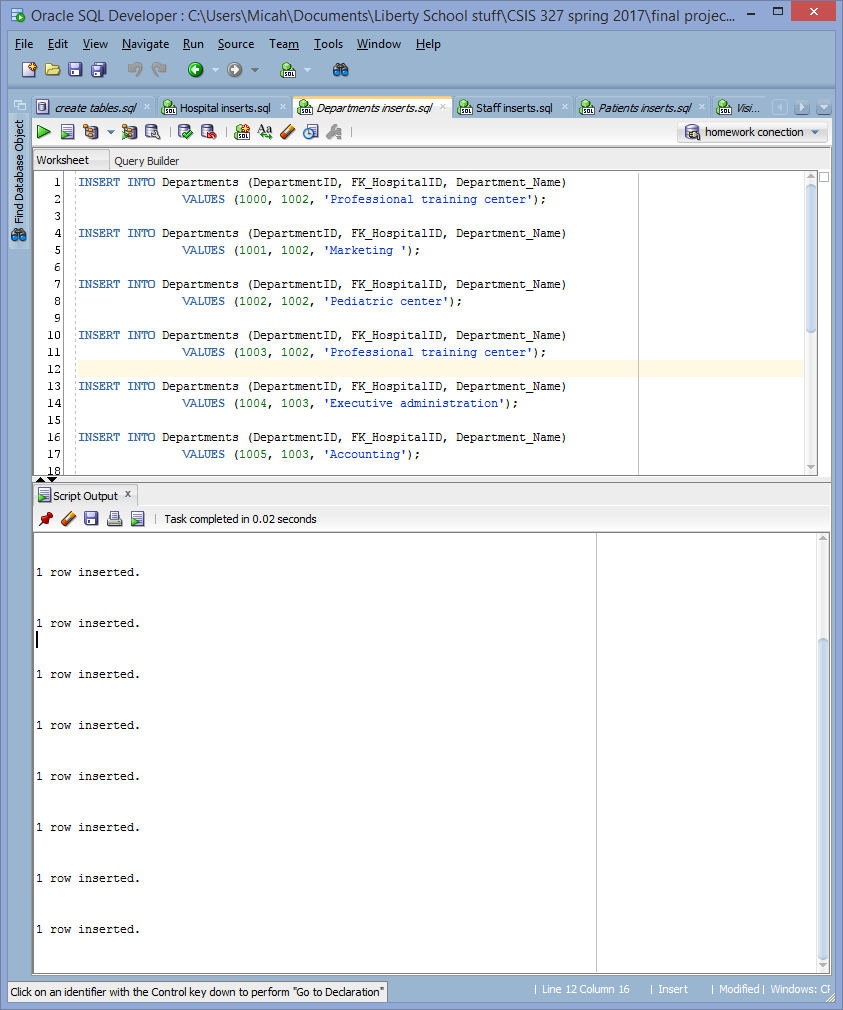
VALUES (1008, 1004, 'Critical care');

INSERT INTO Departments (DepartmentID, FK\_HospitalID, Department\_Name)

VALUES (1009, 1004, 'Pediatric center');

INSERT INTO Departments (DepartmentID, FK\_HospitalID, Department\_Name)

VALUES (1010, 1004, 'Professional training center');



INSERT INTO Staff (StaffID, Staff\_First\_Name, Staff\_Last\_Name, Staff\_Phone, Staff\_Email, Staff\_Addess, Staff\_City, Staff\_Zip, FK\_DepartmentID, Staff\_Office\_location)

VALUES (1000, 'Mayte', 'Treasure', 1234567890, 'Terson59@rhyta.com','8782 N. Wintergreen Circle','Vicksburg',39180,1000,'East Wing');

INSERT INTO Staff (StaffID, Staff\_First\_Name, Staff\_Last\_Name, Staff\_Phone, Staff\_Email, Staff\_Addess, Staff\_City, Staff\_Zip, FK\_DepartmentID, Staff\_Office\_location)

VALUES (1001, 'Kleio', 'Ishani', 1234567890, 'Eforst56@superrito.com','8 East Cactus Drive','Reynoldsburg',32137,1001,'Basement');

INSERT INTO Staff (StaffID, Staff\_First\_Name, Staff\_Last\_Name, Staff\_Phone, Staff\_Email, Staff\_Addess, Staff\_City, Staff\_Zip, FK\_DepartmentID, Staff\_Office\_location)

VALUES (1002, 'Divya', 'Tiwlip', 1234567890, 'Ablemplaid48@cuvox.de','115 E. Rock Creek Circle','Palm Coast',32137,1002,'Top Floor');

INSERT INTO Staff (StaffID, Staff\_First\_Name, Staff\_Last\_Name, Staff\_Phone, Staff\_Email, Staff\_Addess, Staff\_City, Staff\_Zip, FK\_DepartmentID, Staff\_Office\_location)

VALUES (1003, 'Roland', 'Sebastian', 1234567890, 'Abse1957@einrot.com','679 Pacific Dr.','Reading',01867,1003,'');

INSERT INTO Staff (StaffID, Staff\_First\_Name, Staff\_Last\_Name, Staff\_Phone, Staff\_Email, Staff\_Addess, Staff\_City, Staff\_Zip, FK\_DepartmentID, Staff\_Office\_location)

VALUES (1004, 'Indira', 'Rajeev', 1234567890, 'Thut1953@superrito.com','43 West Shady Court','Snohomish',98290,1004,'Main Building');

INSERT INTO Staff (StaffID, Staff\_First\_Name, Staff\_Last\_Name, Staff\_Phone, Staff\_Email, Staff\_Addess, Staff\_City, Staff\_Zip, FK\_DepartmentID, Staff\_Office\_location)

VALUES (1005, 'Ionas', 'Filipina', 1234567890, 'Derry1942@rhyta.com','721 Oak Lane','Poughkeepsie',12601,1005,'Main Building');

INSERT INTO Staff (StaffID, Staff\_First\_Name, Staff\_Last\_Name, Staff\_Phone, Staff\_Email, Staff\_Addess, Staff\_City, Staff\_Zip, FK\_DepartmentID, Staff\_Office\_location)

VALUES (1006, 'Nirmal', 'Doncho', 1234567890, 'Gorry1980@fleckens.hu','24 Paris Hill Road','South Portland',04106,1006,'Basement');

INSERT INTO Staff (StaffID, Staff\_First\_Name, Staff\_Last\_Name, Staff\_Phone, Staff\_Email, Staff\_Addess, Staff\_City, Staff\_Zip, FK\_DepartmentID, Staff\_Office\_location)

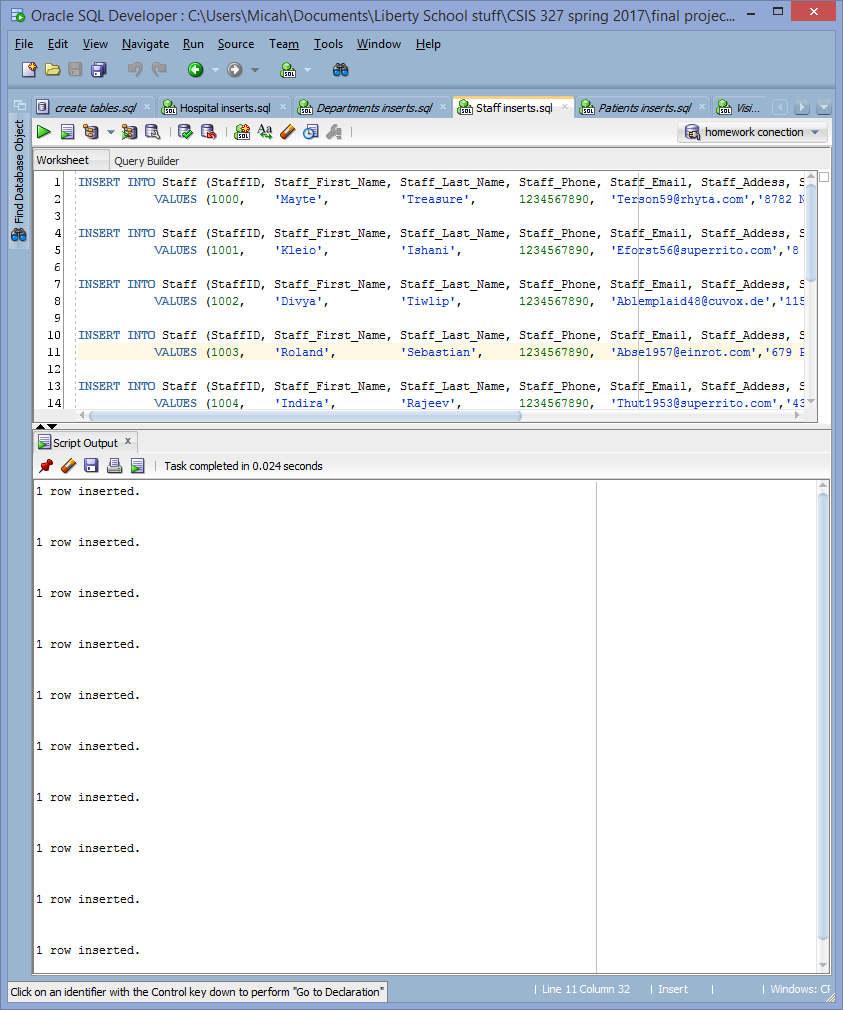
VALUES (1007, 'Uranus', 'Eusebius', 1234567890, 'Capt1929@rhyta.com','533 Bank Lane','Williamsburg',23185,1007,'East Wing');

INSERT INTO Staff (StaffID, Staff\_First\_Name, Staff\_Last\_Name, Staff\_Phone, Staff\_Email, Staff\_Addess, Staff\_City, Staff\_Zip, FK\_DepartmentID, Staff\_Office\_location)

VALUES (1008, 'Zulfaqar', 'Uduak', 1234567890, 'Olde1931@einrot.com','9192 Sussex Dr.','Camas',98607,1008,'Secound Building');

INSERT INTO Staff (StaffID, Staff\_First\_Name, Staff\_Last\_Name, Staff\_Phone, Staff\_Email, Staff\_Addess, Staff\_City, Staff\_Zip, FK\_DepartmentID, Staff\_Office\_location)

VALUES (1009, 'Patroclus', 'Hakan', 1234567890, 'Amen1978@superrito.com','718 Littleton Road','Fort Washington',20744,1009,'Main Building');



INSERT INTO Patients (PatientID, Patient\_First\_Name, Patient\_Last\_Name, Patient\_DOB, Patient\_Gender, Patient\_Phone, Patient\_Email, Patient\_Address, Patient\_City, Patient\_Zip)

VALUES (1000, 'Vidya', 'Aleksey','27-Oct-2037 06:28:20','Female',1234567890,'Spond1983@cuvox.de',' 386 West Drive','Kernersville',27284);

INSERT INTO Patients (PatientID, Patient\_First\_Name, Patient\_Last\_Name, Patient\_DOB, Patient\_Gender, Patient\_Phone, Patient\_Email, Patient\_Address, Patient\_City, Patient\_Zip)

VALUES (1001, 'Widald', 'Louise','19-Feb-1972 07:25:24','Female',1234567890,'Havis1969@dayrep.com','36 North Smoky Hollow Ave.','Olympia',98512);

INSERT INTO Patients (PatientID, Patient\_First\_Name, Patient\_Last\_Name, Patient\_DOB, Patient\_Gender, Patient\_Phone, Patient\_Email, Patient\_Address, Patient\_City, Patient\_Zip)

VALUES (1002, 'Khasan', 'Taliesin','31-Dec-2010 02:51:26','Female',1234567890,'Eass1945@superrito.com','45 Marsh Rd.','Merrimack',03054);

INSERT INTO Patients (PatientID, Patient\_First\_Name, Patient\_Last\_Name, Patient\_DOB, Patient\_Gender, Patient\_Phone, Patient\_Email, Patient\_Address, Patient\_City, Patient\_Zip)

VALUES (1003, 'Prateek', 'Hyacinth','17-Nov-2002 11:12:27','Female',1234567890,'Shmidecir@armyspy.com','427 University Ave.','Cincinnati',45211);

INSERT INTO Patients (PatientID, Patient\_First\_Name, Patient\_Last\_Name, Patient\_DOB, Patient\_Gender, Patient\_Phone, Patient\_Email, Patient\_Address, Patient\_City, Patient\_Zip)

VALUES (1004, 'Aoife', 'Iliyana','26-Nov-2037 07:12:22','Female',1234567890,'Thars1990@rhyta.com','8246 Beaver Ridge Ave.','Hamilton',45011);

INSERT INTO Patients (PatientID, Patient\_First\_Name, Patient\_Last\_Name, Patient\_DOB, Patient\_Gender, Patient\_Phone, Patient\_Email, Patient\_Address, Patient\_City, Patient\_Zip)

VALUES (1005, 'Dominik', 'Jeronim','23-Jan-1972 10:16:59','Female',1234567890,'Buddard1929@gustr.com','8782 N. Wintergreen Circle','Vicksburg',39180);

INSERT INTO Patients (PatientID, Patient\_First\_Name, Patient\_Last\_Name, Patient\_DOB, Patient\_Gender, Patient\_Phone, Patient\_Email, Patient\_Address, Patient\_City, Patient\_Zip)

VALUES (1006, 'Mordad', 'Dip','09-Jun-1984 10:51:59','Female',1234567890,'Comee1977@cuvox.de','45 Briarwood Ave.','Providence',02904);

INSERT INTO Patients (PatientID, Patient\_First\_Name, Patient\_Last\_Name, Patient\_DOB, Patient\_Gender, Patient\_Phone, Patient\_Email, Patient\_Address, Patient\_City, Patient\_Zip)

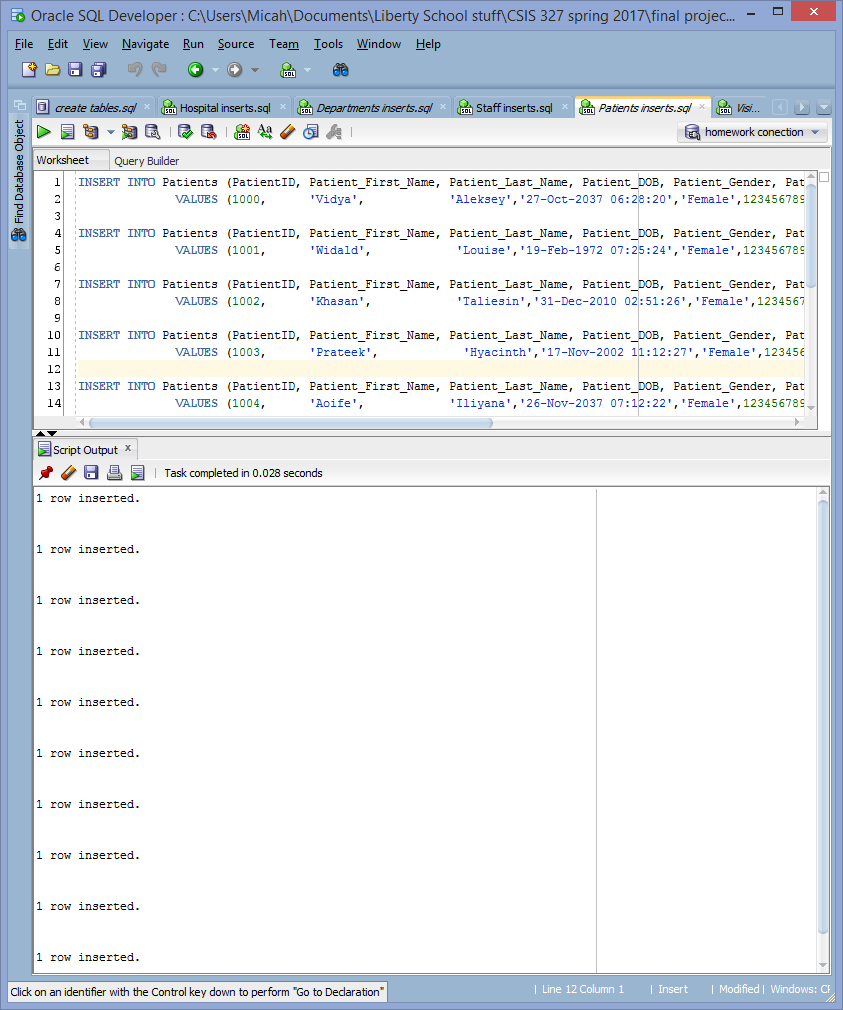
VALUES (1007, 'Fleur', ' Ireneus','23-Dec-2028 01:10:25','Female',1234567890,'Witiet41@teleworm.us','19 Jones Drive','Rosemount',55068);

INSERT INTO Patients (PatientID, Patient\_First\_Name, Patient\_Last\_Name, Patient\_DOB, Patient\_Gender, Patient\_Phone, Patient\_Email, Patient\_Address, Patient\_City, Patient\_Zip)

VALUES (1008, 'Duha', 'Keitha','24-Jun-1994 02:58:56','Female',1234567890,'Harl1984@jourrapide.com','823 Union St.','Woburn',01801);

INSERT INTO Patients (PatientID, Patient\_First\_Name, Patient\_Last\_Name, Patient\_DOB, Patient\_Gender, Patient\_Phone, Patient\_Email, Patient\_Address, Patient\_City, Patient\_Zip)

VALUES (1009, 'Ana', 'Alard','08-Dec-1975 12:52:54','Female',1234567890,'Fals1934@dayrep.com','6 Market Lane','Irvington',07111);



INSERT INTO Visits (VisitID, Visit\_Date, Visit\_Discharge\_Date, Visit\_Cost, FK\_PatientID, FK\_DepartmentID)

VALUES (1000, '18-Jul-1988 10:47:07','04-Dec-2006 07:37:18',4643,1000, 1008 );

INSERT INTO Visits (VisitID, Visit\_Date, Visit\_Discharge\_Date, Visit\_Cost, FK\_PatientID, FK\_DepartmentID)

VALUES (1001, '14-Jan-1987 06:31:43', '30-Jun-1998 05:41:45',1012,1001, 1008 );

INSERT INTO Visits (VisitID, Visit\_Date, Visit\_Discharge\_Date, Visit\_Cost, FK\_PatientID, FK\_DepartmentID)

VALUES (1002, '14-Jan-2001 01:02:11','', '', 1002, 1008 );

INSERT INTO Visits (VisitID, Visit\_Date, Visit\_Discharge\_Date, Visit\_Cost, FK\_PatientID, FK\_DepartmentID)

VALUES (1003, '18-Jun-1998 03:56:38','', '', 1003, 1009 );

INSERT INTO Visits (VisitID, Visit\_Date, Visit\_Discharge\_Date, Visit\_Cost, FK\_PatientID, FK\_DepartmentID)

VALUES (1004, '25-Jan-1985 10:04:19','02-Dec-1998 12:06:44',619881,1004, 1009 );

INSERT INTO Visits (VisitID, Visit\_Date, Visit\_Discharge\_Date, Visit\_Cost, FK\_PatientID, FK\_DepartmentID)

VALUES (1005, '25-Dec-2002 11:34:33','', '', 1005, 1006 );

INSERT INTO Visits (VisitID, Visit\_Date, Visit\_Discharge\_Date, Visit\_Cost, FK\_PatientID, FK\_DepartmentID)

VALUES (1006, '17-Oct-1996 12:51:26','18-Oct-1996 12:51:26',10000,1006, 1006 );

INSERT INTO Visits (VisitID, Visit\_Date, Visit\_Discharge\_Date, Visit\_Cost, FK\_PatientID, FK\_DepartmentID)

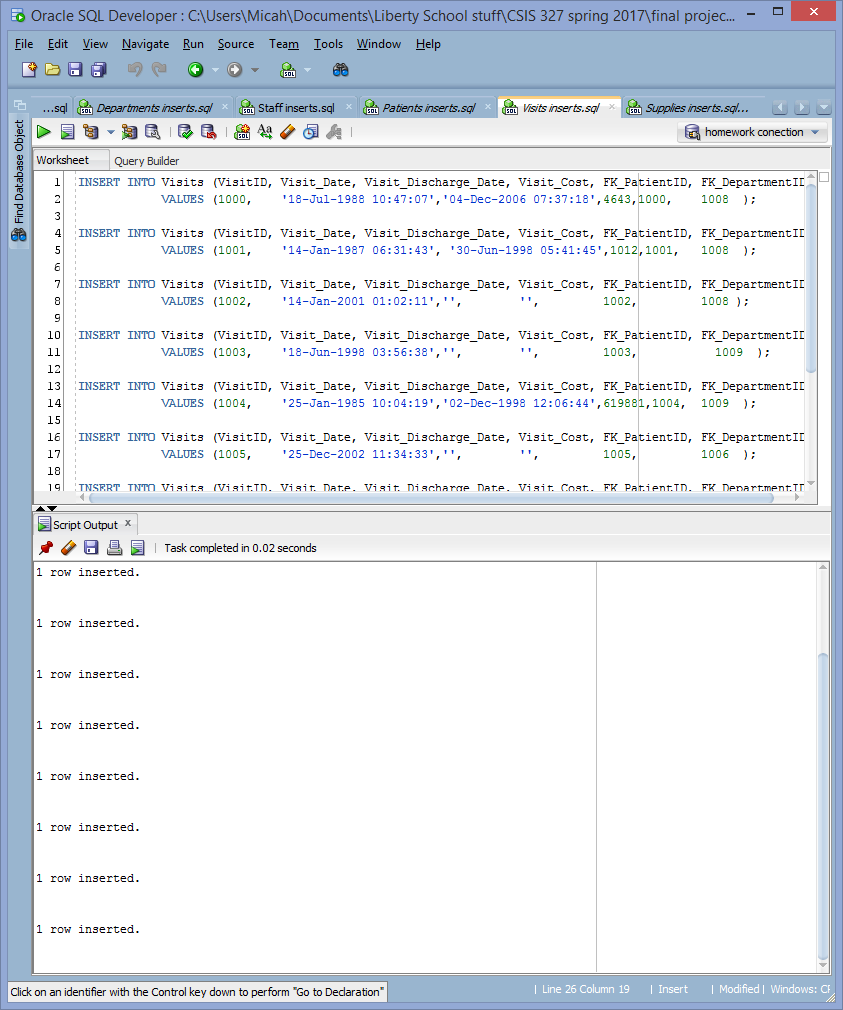
VALUES (1007, '30-May-2013 06:16:54','30-Jun-2013 11:16:54',61891,1007, 1006 );

INSERT INTO Visits (VisitID, Visit\_Date, Visit\_Discharge\_Date, Visit\_Cost, FK\_PatientID, FK\_DepartmentID)

VALUES (1008, '07-Dec-1999 10:30:27','14-Dec-1999 08:30:27',99,1008, 1002 );

INSERT INTO Visits (VisitID, Visit\_Date, Visit\_Discharge\_Date, Visit\_Cost, FK\_PatientID, FK\_DepartmentID)

VALUES (1009, '17-Jun-2003 11:45:06','17-Jun-2003 11:45:06','',1009, 1002 );



INSERT INTO Supplies (SupplyID, Supply\_Name, Supply\_Cost, Supply\_Quantiy\_Used, Supply\_Type, FK\_VisitID)

VALUES (1000, 'Bandages', 2, 14, 'Wound Care',1000);

INSERT INTO Supplies (SupplyID, Supply\_Name, Supply\_Cost, Supply\_Quantiy\_Used, Supply\_Type, FK\_VisitID)

VALUES (1001, 'Gauze', 13, 100, 'Wound Care',1001);

INSERT INTO Supplies (SupplyID, Supply\_Name, Supply\_Cost, Supply\_Quantiy\_Used, Supply\_Type, FK\_VisitID)

VALUES (1002, 'Ointments', 7, 3, 'Wound Care',1002);

INSERT INTO Supplies (SupplyID, Supply\_Name, Supply\_Cost, Supply\_Quantiy\_Used, Supply\_Type, FK\_VisitID)

VALUES (1003, 'Oxygen Masks',120, 1, 'Respiratory',1003);

INSERT INTO Supplies (SupplyID, Supply\_Name, Supply\_Cost, Supply\_Quantiy\_Used, Supply\_Type, FK\_VisitID)

VALUES (1004, 'Oxygen Tank',185, 3, 'Respiratory',1004);

INSERT INTO Supplies (SupplyID, Supply\_Name, Supply\_Cost, Supply\_Quantiy\_Used, Supply\_Type, FK\_VisitID)

VALUES (1005, 'Scalpel', 27, 5, 'Surgical', 1005);

INSERT INTO Supplies (SupplyID, Supply\_Name, Supply\_Cost, Supply\_Quantiy\_Used, Supply\_Type, FK\_VisitID)

VALUES (1006, 'Mask', 1, 50, 'Surgical', 1006);

INSERT INTO Supplies (SupplyID, Supply\_Name, Supply\_Cost, Supply\_Quantiy\_Used, Supply\_Type, FK\_VisitID)

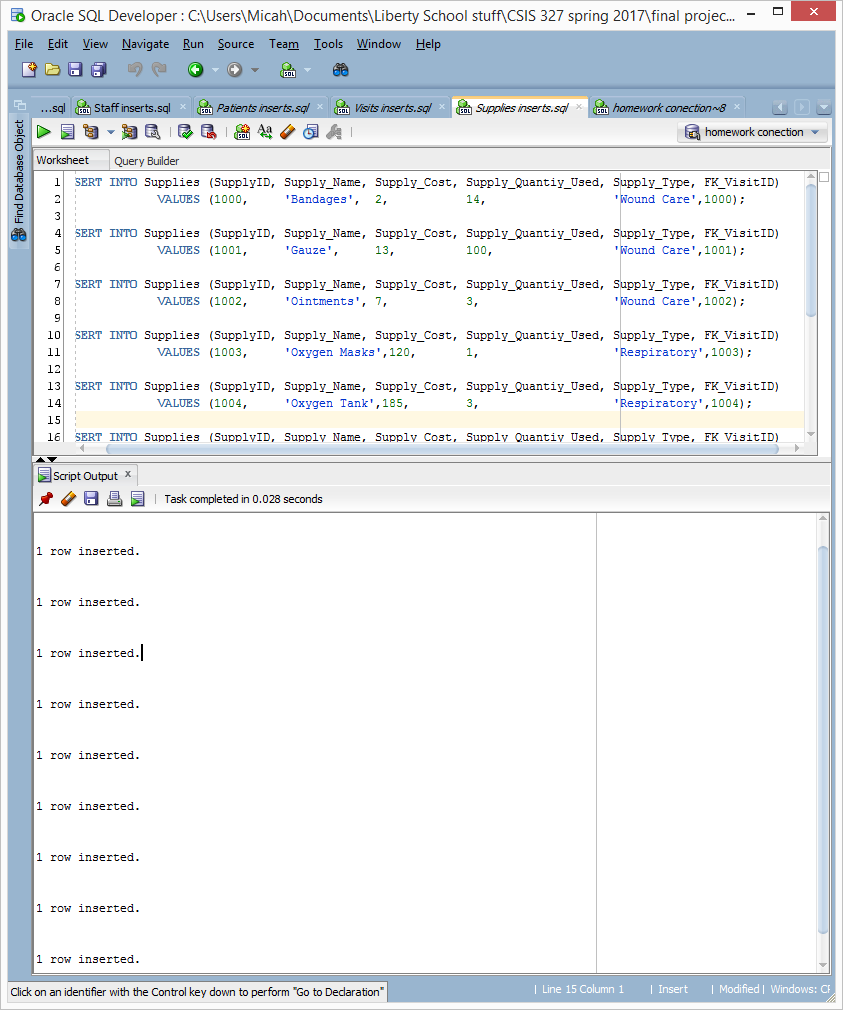
VALUES (1007, 'Morphine', 1000, 2, 'Emergency and Trauma',1007);

INSERT INTO Supplies (SupplyID, Supply\_Name, Supply\_Cost, Supply\_Quantiy\_Used, Supply\_Type, FK\_VisitID)

VALUES (1008, 'Splint', 57, 1, 'Emergency and Trauma',1008);

INSERT INTO Supplies (SupplyID, Supply\_Name, Supply\_Cost, Supply\_Quantiy\_Used, Supply\_Type, FK\_VisitID)

VALUES (1009, 'Cast', 300, 2, 'Emergency and Trauma',1009);



**SQL Reports**

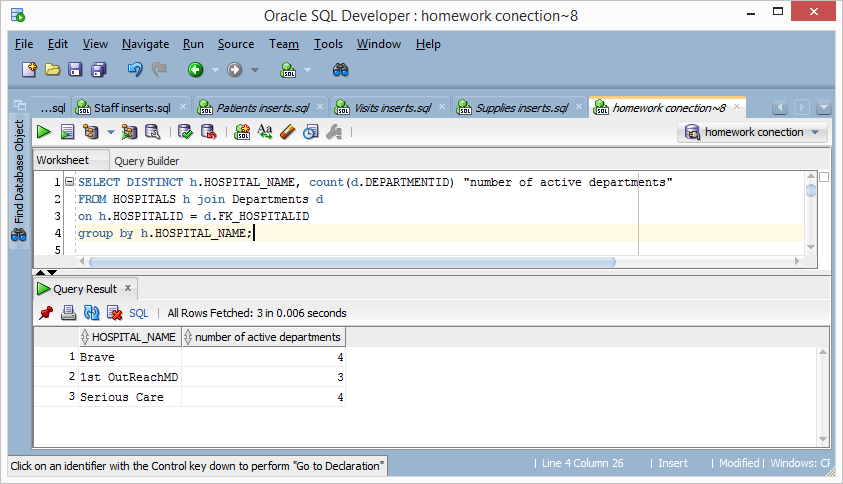
Lists active hospitals and the number of departments they operate.

SELECT DISTINCT h.HOSPITAL\_NAME, count(d.DEPARTMENTID) "number of active departments"

FROM HOSPITALS h join Departments d

on h.HOSPITALID = d.FK\_HOSPITALID

group by h.HOSPITAL\_NAME;



Lists patients and the supplies used in their visits.

SELECT p.PATIENT\_FIRST\_NAME, p.PATIENT\_LAST\_NAME,

s.SUPPLY\_NAME, s.SUPPLY\_TYPE,

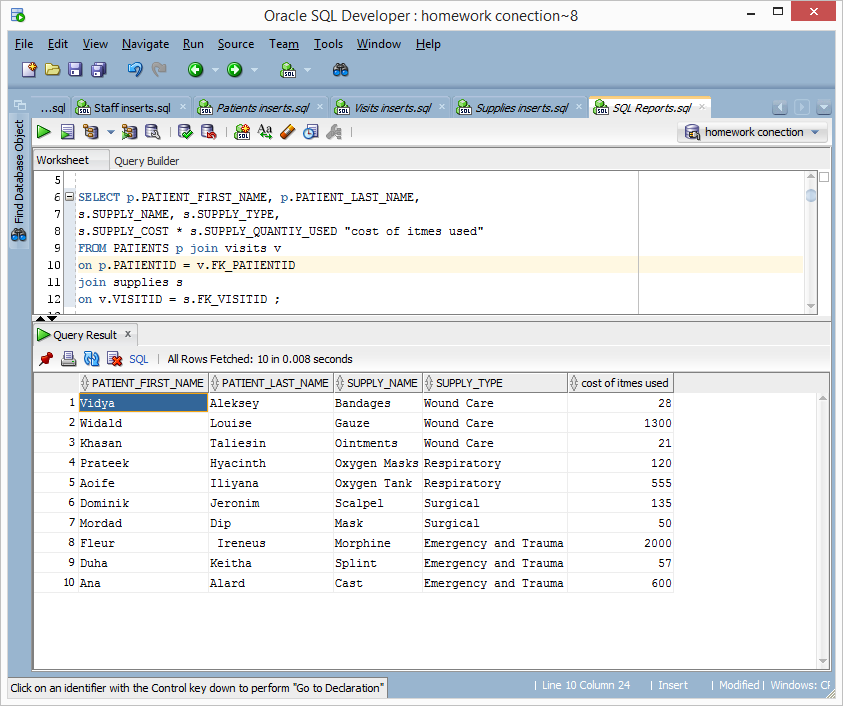
s.SUPPLY\_COST \* s.SUPPLY\_QUANTIY\_USED "cost of itmes used"

FROM PATIENTS p join visits v

on p.PATIENTID = v.FK\_PATIENTID

join supplies s

on v.VISITID = s.FK\_VISITID ;

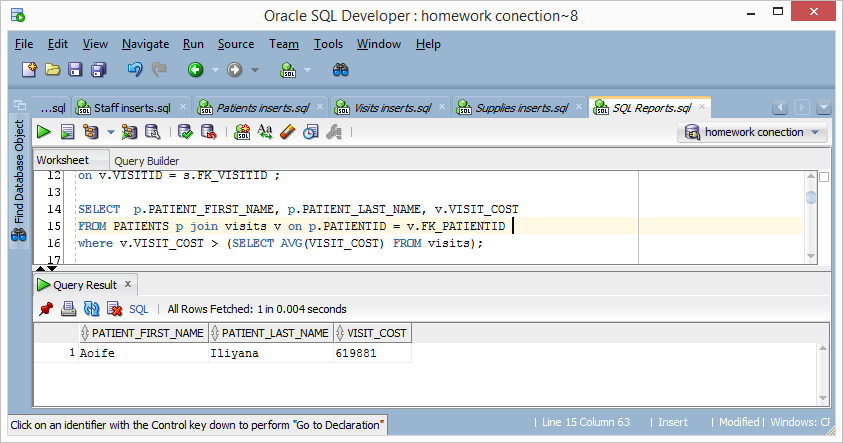


Lists patients whose visit cost more than the average visit.

SELECT p.PATIENT\_FIRST\_NAME, p.PATIENT\_LAST\_NAME, v.VISIT\_COST

FROM PATIENTS p join visits v on p.PATIENTID = v.FK\_PATIENTID

where v.VISIT\_COST > (SELECT AVG(VISIT\_COST) FROM visits);



Lists hospitals with no active departments i.e. shutdown or not yet open

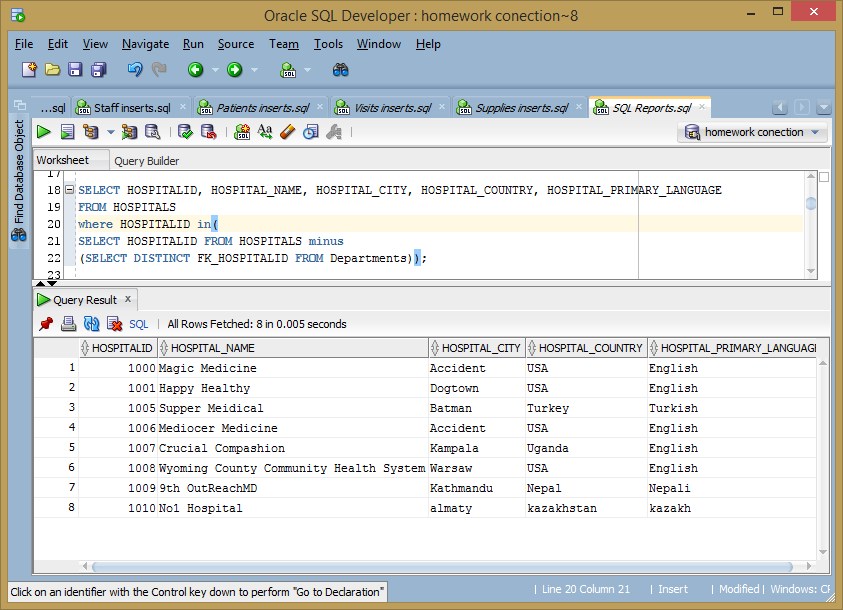
SELECT HOSPITALID, HOSPITAL\_NAME, HOSPITAL\_CITY, HOSPITAL\_COUNTRY, HOSPITAL\_PRIMARY\_LANGUAGE

FROM HOSPITALS

where HOSPITALID in(

SELECT HOSPITALID FROM HOSPITALS minus

(SELECT DISTINCT FK\_HOSPITALID FROM Departments));



Lists departments who have had visits that cost more than 0 dollars.

SELECT \* FROM Departments

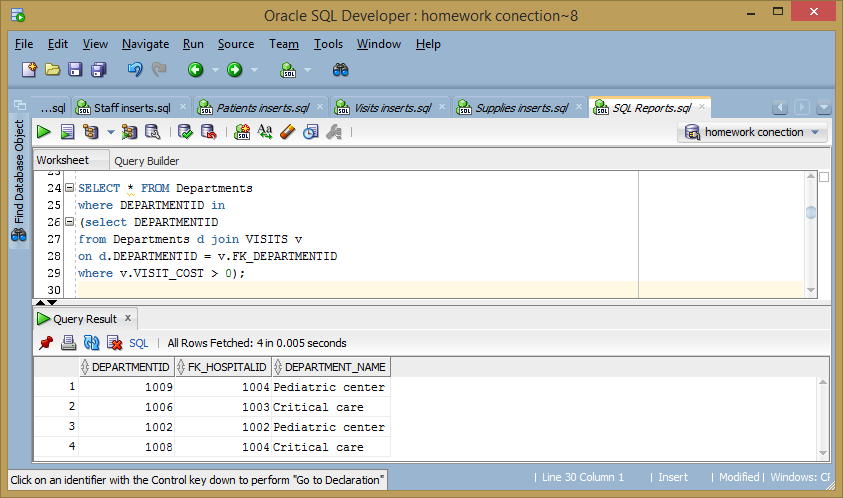
where DEPARTMENTID in

(select DEPARTMENTID

from Departments d join VISITS v

on d.DEPARTMENTID = v.FK\_DEPARTMENTID

where v.VISIT\_COST > 0);



Lists staff who are in departments the conduct visits

SELECT STAFFID, STAFF\_FIRST\_NAME, STAFF\_LAST\_NAME, FK\_DEPARTMENTID, STAFF\_EMAIL FROM Staff

where STAFFID in

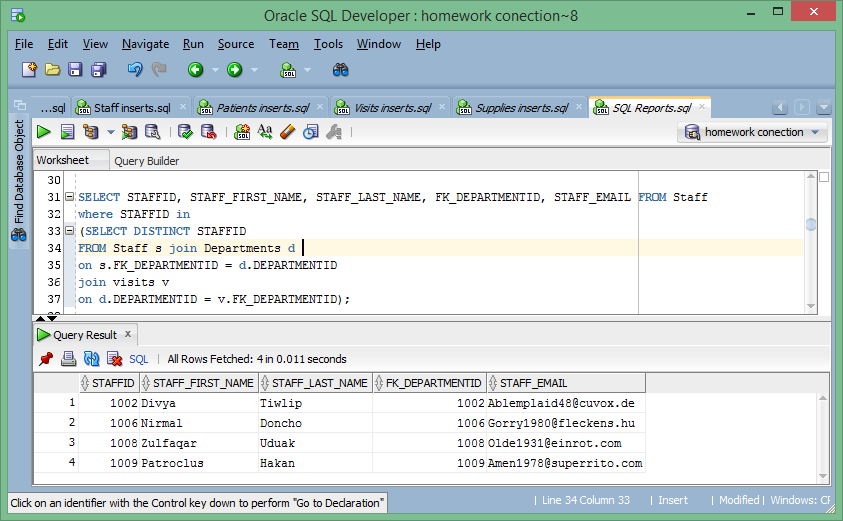
(SELECT DISTINCT STAFFID

FROM Staff s join Departments d

on s.FK\_DEPARTMENTID = d.DEPARTMENTID

join visits v

on d.DEPARTMENTID = v.FK\_DEPARTMENTID);



Lists visit length in days and related information for visits that are less than the average visit cost.

SELECT VISITID, VISIT\_DISCHARGE\_DATE - VISIT\_DATE "visist length",

FK\_PATIENTID, FK\_DEPARTMENTID, VISIT\_COST

FROM Visits

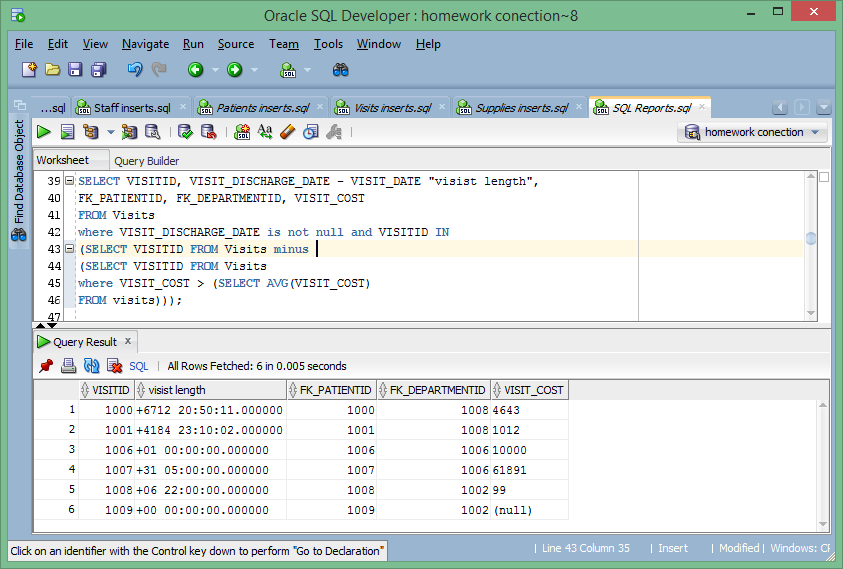
where VISIT\_DISCHARGE\_DATE is not null and VISITID IN

(SELECT VISITID FROM Visits minus

(SELECT VISITID FROM Visits

where VISIT\_COST > (SELECT AVG(VISIT\_COST)

FROM visits)));



**Schema Objects**

CREATE INDEX HOSPITALS\_index

ON HOSPITALS (HospitalID, Hospital\_Name);

CREATE INDEX Departments\_index

ON Departments (DepartmentID, Department\_Name);

CREATE INDEX Staff\_index

ON Staff (StaffID, Staff\_First\_Name, Staff\_Last\_Name);

CREATE INDEX PATIENTS\_index

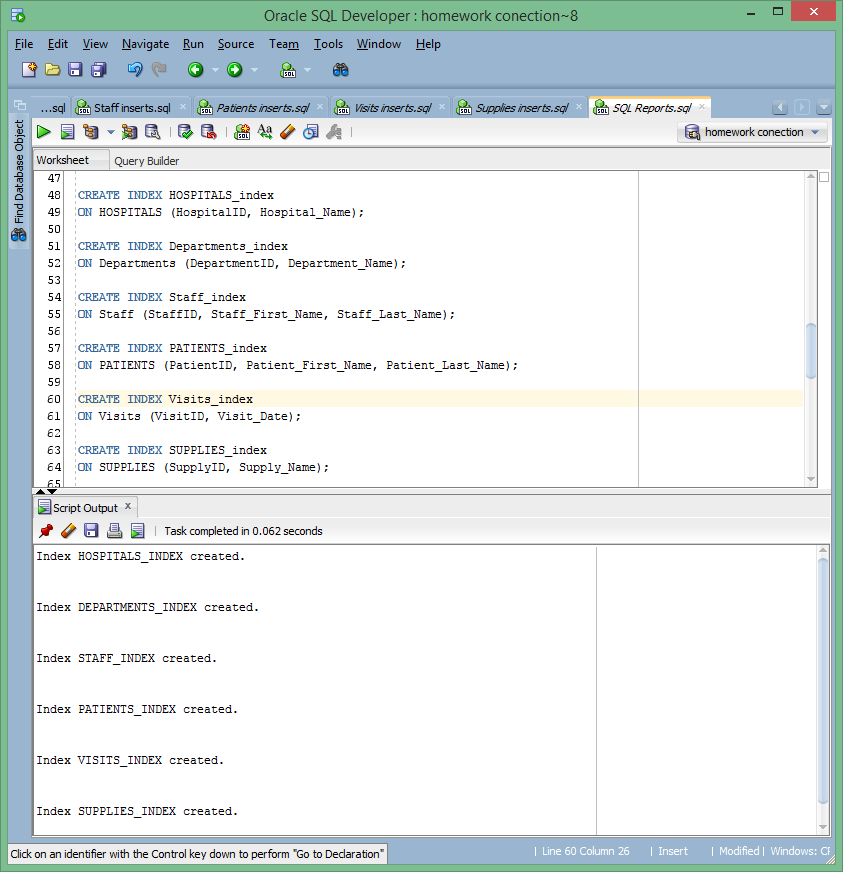
ON PATIENTS (PatientID, Patient\_First\_Name, Patient\_Last\_Name);

CREATE INDEX Visits\_index

ON Visits (VisitID, Visit\_Date);

CREATE INDEX SUPPLIES\_index

ON SUPPLIES (SupplyID, Supply\_Name);



View of patents and visits info for Serious Care hospital.

create view Patents\_of\_Serious\_Care as

SELECT p.PATIENTID, v.VISIT\_DATE, v.VISIT\_COST,

p.PATIENT\_FIRST\_NAME, p.PATIENT\_LAST\_NAME,

p.PATIENT\_DOB, p.PATIENT\_PHONE, p.PATIENT\_EMAIL,

p.PATIENT\_ADDRESS, p.PATIENT\_CITY, p.PATIENT\_ZIP

FROM PATIENTS p join visits v

on p.PATIENTID = v.FK\_PATIENTID

join Departments d

on d.DEPARTMENTID = v.FK\_DEPARTMENTID

join HOSPITALS h

on d.FK\_HOSPITALID = h.HOSPITALID

where HOSPITALID = 1004;

View of staff and department info for Brave hospital

create view Staff\_of\_Brave as

SELECT s.STAFFID, d.DEPARTMENTID, d.DEPARTMENT\_NAME,

s.STAFF\_FIRST\_NAME, s.STAFF\_LAST\_NAME, s.STAFF\_PHONE, s.STAFF\_EMAIL,

s.STAFF\_OFFICE\_LOCATION, s.STAFF\_ADDESS, s.STAFF\_CITY, s.STAFF\_ZIP

FROM Staff s

join Departments d

on s.FK\_DEPARTMENTID = d.DEPARTMENTID

join HOSPITALS h

on d.FK\_HOSPITALID = h.HOSPITALID

where HOSPITALID = 1002;

CREATE SEQUENCE PATIENTID\_SEQUENCE

START WITH 1010

INCREMENT BY 1

MAXVALUE 9000;