--CREATE USER bj\_admin IDENTIFIED BY 321;

--GRANT CONNECT TO bj\_admin;

CREATE TABLE animal\_type

( TID number(10) NOT NULL,

TYPE varchar2(50) NOT NULL,

CONSTRAINT atype\_pk PRIMARY KEY (TID)

);

CREATE TABLE volunteers

( VID number(10) NOT NULL,

Name varchar2(100) NOT NULL,

Tel number(10) NOT NULL,

email varchar2(100) NOT NULL,

CONSTRAINT vol\_pk PRIMARY KEY (VID)

);

CREATE TABLE house

( HID number(10) NOT NULL,

House\_name varchar2(100) NOT NULL,

TYPE NUMBER(10) NOT NULL,

CONSTRAINT house\_pk PRIMARY KEY (HID)

);

ALTER TABLE house

ADD CONSTRAINT house\_fk

FOREIGN KEY (TYPE)

REFERENCES animal\_type(TID);

CREATE TABLE guardian

( GID number(10) NOT NULL,

Guard\_name varchar2(100) NOT NULL,

House NUMBER(10) NOT NULL,

CONSTRAINT guard\_pk PRIMARY KEY (GID)

);

ALTER TABLE guardian

ADD CONSTRAINT guard\_fk

FOREIGN KEY (House)

REFERENCES House(HID);

INSERT INTO animal\_type (TID, TYPE) VALUES (1, 'Black jaguar');

INSERT INTO animal\_type (TID, TYPE) VALUES (2, 'White tiger');

INSERT INTO animal\_type (TID, TYPE) VALUES (3, 'Cloud leopard');

INSERT INTO animal\_type (TID, TYPE) VALUES (4, 'Bengal tiger');

INSERT INTO animal\_type (TID, TYPE) VALUES (5, 'Javan leopard');

INSERT INTO volunteers (VID, Name,Tel,email) VALUES (1, 'Geethmi',2177909090, 'gdissanayake@eiu.edu');

INSERT INTO volunteers (VID, Name,Tel,email) VALUES (2, 'Vidula',2177909091, 'vidula@eiu.edu');

INSERT INTO volunteers (VID, Name,Tel,email) VALUES (3, 'Shalini',2177909092, 'shalini@eiu.edu');

INSERT INTO volunteers (VID, Name,Tel,email) VALUES (4, 'Dinesh', 2177909093, 'dinesh@eiu.edu');

INSERT INTO house (HID, House\_name,TYPE) VALUES (1, 'Gryffindor', 1);

INSERT INTO house (HID, House\_name,TYPE) VALUES (2, 'Hufflepuff', 3);

INSERT INTO house (HID, House\_name,TYPE) VALUES (3, 'Ravenclaw', 5);

INSERT INTO house (HID, House\_name,TYPE) VALUES (4, 'Slytherin', 4);

INSERT INTO guardian (GID, Guard\_name,House) VALUES (1, 'Minerva McGonagall', 1);

INSERT INTO guardian (GID, Guard\_name,House) VALUES (2, 'Pomona Sprout', 2);

INSERT INTO guardian (GID, Guard\_name,House) VALUES (3, 'Filius Flitwick', 3);

INSERT INTO guardian (GID, Guard\_name,House) VALUES (4, 'Severus Snape', 4);

CREATE TABLE volunteering

( JID number(10) NOT NULL,

VID number(10) NOT NULL,

HID NUMBER(10) NOT NULL,

Start\_date DATE NOT NULL,

End\_date DATE NOT NULL,

CONSTRAINT vting\_pk PRIMARY KEY (JID)

);

ALTER TABLE volunteering

ADD CONSTRAINT vting\_fk

FOREIGN KEY (VID)

REFERENCES volunteers(VID);

ALTER TABLE volunteering

ADD CONSTRAINT vting\_fk1

FOREIGN KEY (HID)

REFERENCES house(HID);

INSERT INTO volunteering (JID,VID,HID,Start\_date,End\_date) VALUES (1, 2, 4, '31-JAN-2019','26-FEB-2019');

INSERT INTO volunteering (JID,VID,HID,Start\_date,End\_date) VALUES (2, 1, 1, '31-MAR-2019','07-APR-2019');

INSERT INTO volunteering (JID,VID,HID,Start\_date,End\_date) VALUES (3, 3, 2, '02-FEB-2019','20-FEB-2019');

INSERT INTO volunteering (JID,VID,HID,Start\_date,End\_date) VALUES (4, 4, 1, '01-MAR-2019','01-APR-2019');

SELECT e.type,d.house\_name

FROM animal\_type e

INNER JOIN house d ON e.tid = d.type

ORDER BY e.type;

SELECT e.type,d.house\_name

FROM animal\_type e

LEFT OUTER JOIN house d ON e.tid = d.type

ORDER BY e.type;

SELECT e.type,d.house\_name

FROM animal\_type e

RIGHT OUTER JOIN house d ON e.tid = d.type

ORDER BY e.type;

SELECT e.type,d.house\_name

FROM animal\_type e

FULL OUTER JOIN house d ON e.tid = d.type

ORDER BY e.type;

SELECT e.type,d.house\_name

FROM animal\_type e

CROSS JOIN house d

ORDER BY e.type;

SELECT e.type,d.house\_name

FROM animal\_type e

NATURAL JOIN house d

ORDER BY e.type,d.house\_name;

SELECT e.start\_date,d.house\_name FROM volunteering e JOIN house d USING (d.vid)ORDER BY d.house\_name;