PROJECT PRMS :

-- To Create Statements of Users

CREATE USER ADMIN123 IDENTIFIED BY "Admin_123_property_mgnt";

GRANT CREATE USER, DROP USER, EXECUTE ANY TYPE, EXECUTE ANY PROCEDURE, ALTER ANY PROCEDURE, CREATE ANY TABLE, UNLIMITED TABLESPACE, DROP ANY TRIGGER, CREATE ANY PROCEDURE, ALTER ANY INDEX, CREATE ANY INDEX, CREATE TABLE, CREATE SESSION, DROP ANY TYPE, CREATE ANY TRIGGER, CREATE SEQUENCE, DROP ANY INDEX, SELECT ANY TABLE, DROP ANY TABLE, CREATE ANY TYPE, ALTER ANY TRIGGER, ALTER ANY SEQUENCE, CREATE ANY SEQUENCE,
UPDATE ANY TABLE, CREATE TRIGGER, DROP ANY PROCEDURE, DROP ANY SEQUENCE, CREATE ANY VIEW, DELETE ANY TABLE, INSERT ANY TABLE, ALTER ANY TABLE, READ ANY TABLE, DEBUG CONNECT SESSION, MERGE ANY VIEW, ALTER ANY TYPE, CREATE PROCEDURE, SELECT ANY SEQUENCE, DROP ANY VIEW, CREATE VIEW to ADMIN123;

CREATE USER MANAGER123 IDENTIFIED BY "Manager_123_property_mgnt";
CREATE USER OWNER123 IDENTIFIED BY "Owner_123_property_mgnt";
CREATE USER TENANT123 IDENTIFIED BY "Tenant_123_property_mgnt";

-- To Grant Statements for access to creating and connecting Users

GRANT CREATE SESSION TO MANAGER123;
GRANT CONNECT TO MANAGER123;

GRANT CREATE SESSION TO OWNER123;
GRANT CONNECT TO OWNER123;

GRANT CONNECT TO TENANT123;
GRANT CREATE SESSION TO TENANT123;

-- To Grant Permissions to Created Users to access tables

grant select, Insert, update, Delete on admin123.property to OWNER123;

grant select, Insert, update, Delete on admin123.owner to OWNER123;

grant select, Insert, update, Delete on admin123.manager to MANAGER123;

grant select, Insert, update, Delete on admin123.unit to MANAGER123;

grant select, Insert, update, Delete on admin123.lease to MANAGER123;

grant select, Insert, update, Delete on admin123.maintenance to MANAGER123;

grant select, Insert, update, Delete on admin123.tenants to MANAGER123;

grant select, Insert, update, Delete on admin123.tenants to TENANT123;

grant Select, Insert (main_type) on admin123.maintenance to TENANT123;

grant select, Insert, update, Delete on admin123.unit to TENANT123;

--> To Create Tables

-- Create MANAGER Table
```
CREATE TABLE MANAGER(
MANAGER_ID INT NOT NULL PRIMARY KEY,
MANAGER_NAME VARCHAR(30) NOT NULL,
MANAGER_CONTACT VARCHAR(20) NOT NULL,
MANAGER_ADDRESS VARCHAR(50) NOT NULL
);
```

-- Create TENANTS Table
```
CREATE TABLE TENANTS(
TENANT_ID INT PRIMARY KEY,
TENANT_NAME VARCHAR(30),
TENANT_ADDRESS VARCHAR(50),
TENANT_CONTACT VARCHAR(20)
);
```

-- Create PROPERTY Table
```
CREATE TABLE PROPERTY(
PROPERTY_ID INT NOT NULL PRIMARY KEY,
MANAGER_ID INT NOT NULL,
UNIT_COUNT INT NOT NULL,
PROPERTY_OWNER VARCHAR(30) NOT NULL,
PROPERTY_ADDRESS VARCHAR(50) NOT NULL,
FOREIGN KEY (MANAGER_ID) REFERENCES MANAGER(MANAGER_ID)
);
```

-- Create OWNER Table
```
CREATE TABLE OWNER(
OWNER_ID INT NOT NULL PRIMARY KEY,
PROPERTY_ID INT NOT NULL,
MANAGER_ID INT NOT NULL,
OWNER_NAME VARCHAR(30) NOT NULL,
OWNER_CONTACT VARCHAR(20) NOT NULL,
OWNER_ADDRESS VARCHAR(50) NOT NULL,
FOREIGN KEY (PROPERTY_ID) REFERENCES PROPERTY(PROPERTY_ID),
FOREIGN KEY (MANAGER_ID) REFERENCES MANAGER(MANAGER_ID)
);
```

-- Create UNIT Table
```
CREATE TABLE UNIT(
UNIT_ID INT NOT NULL PRIMARY KEY,
TENANT_ID INT,
```

```sql
OWNER_ID INT NOT NULL,
MANAGER_ID INT NOT NULL,
UNIT_RENT INT NOT NULL,
UNIT_OWNER VARCHAR(30) NOT NULL,
UNIT_ADDRESS VARCHAR(50) NOT NULL,
FOREIGN KEY (TENANT_ID) REFERENCES TENANTS(TENANT_ID),
FOREIGN KEY (OWNER_ID) REFERENCES OWNER(OWNER_ID),
FOREIGN KEY (MANAGER_ID) REFERENCES MANAGER(MANAGER_ID)
);
```

-- Create MAINTENANCE Table
```sql
CREATE TABLE MAINTENANCE(
MAIN_ID INT NOT NULL PRIMARY KEY,
UNIT_ID INT NOT NULL,
MAIN_AMOUNT INT NOT NULL,
TENANTS_CONTACT VARCHAR(30) NOT NULL,
MAIN_START_DATE DATE NOT NULL,
MAIN_END_DATE DATE,
MAIN_TYPE VARCHAR(30) NOT NULL,
FOREIGN KEY (UNIT_ID) REFERENCES UNIT(UNIT_ID)
);
```

-- To Create Sequence for MAIN_ID in MAINTENANCE Table
```sql
create sequence MAIN_ID minvalue 1 start with 401 cache 50;
```

-- Create LEASE Table
```sql
CREATE TABLE LEASE(
LEASE_ID INT NOT NULL PRIMARY KEY,
UNIT_ID INT NOT NULL,
LEASE_AMOUNT INT NOT NULL,
OWNER_NAME VARCHAR(30) NOT NULL,
MANAGER_CONTACT VARCHAR(20) NOT NULL,
LEASE_START_DATE DATE,
LEASE_END_DATE DATE,
TENANT_ID INT,
FOREIGN KEY (UNIT_ID) REFERENCES UNIT(UNIT_ID),
FOREIGN KEY (TENANT_ID) REFERENCES TENANTS(TENANT_ID)
);
```

 -- To check if the tables are present in database

```sql
SELECT COUNT(*) FROM USER_TABLES
WHERE TABLE_NAME IN ('OWNER', 'TENANTS', 'PROPERTY', 'MANAGER', 'UNIT', 'LEASE',
'MAINTENANCE');

SELECT * FROM TAB;
```

--> For Dropping Tables

-- To DROP LEASE TABLE
```
set serveroutput on;
declare
   tcount number;
   begin
      select count(*) into tcount
      from user_tables where table_name = 'LEASE';
   IF TCOUNT>0
   THEN
      EXECUTE IMMEDIATE 'DROP TABLE LEASE';
   END IF;
END;
/
```

-- To DROP MAINTENANCE TABLE
```
set serveroutput on;
declare
   tcount number; begin
      select count(*) into tcount
      from user_tables where table_name = 'MAINTENANCE';
   IF TCOUNT>0
   THEN
      EXECUTE IMMEDIATE 'DROP TABLE MAINTENANCE';
   END IF;
END;
/
```

-- To DROP UNIT TABLE
```
set serveroutput on;
declare
   tcount number;
   begin
      select count(*) into tcount
      from user_tables where table_name = 'UNIT';
   IF TCOUNT>0
   THEN
      EXECUTE IMMEDIATE 'DROP TABLE UNIT';
   END IF;
END;
/
```

-- To DROP OWNER TABLE
```
set serveroutput on;
declare
   tcount number;
   begin
```

```
      select count(*) into tcount
      from user_tables where table_name = 'OWNER';
   IF TCOUNT>0
   THEN
      EXECUTE IMMEDIATE 'DROP TABLE OWNER';
   END IF;
END;
/
```

-- To DROP PROPERTY TABLE
```
set serveroutput on;
declare
   tcount number;
   begin
      select count(*) into tcount
      from user_tables where table_name = 'PROPERTY';
   IF TCOUNT>0
   THEN
      EXECUTE IMMEDIATE 'DROP TABLE PROPERTY';
   END IF;
END;
/
```

-- To DROP TENANTS TABLE
```
set serveroutput on;
declare
   tcount number;
   begin
      select count(*) into tcount
      from user_tables where table_name = 'TENANTS';
   IF TCOUNT>0
   THEN
      EXECUTE IMMEDIATE 'DROP TABLE TENANTS';
   END IF;
END;
/
```

-- CLEARS THE RECYCLE BIN
```
PURGE RECYCLEBIN;
```

-- SHOWS ALL THE TABLES
```
SELECT * FROM TAB;
```

--> Insert Statements

-- MANAGER TABLE INSERT STATEMENT

INSERT INTO "ADMIN123"."MANAGER"
VALUES('201', 'JOHN', '6177869876', '81, Juniper Street');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('202', 'SAM', '8575679876', '82, Forest Hill Street');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('203', 'ADITYA', '6172345678', '83, Saint Alphnosus');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('204', 'LARA', '4162345367', '84, Harvard Street');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('205', 'ROHIT', '8575761846', '85, Columbia Street');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('206', 'JESSI', '6847535358', '86, Huntington Ave');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('207', 'SUNNY', '9182901820', '87, Harvard Street');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('208', 'VAISHNAVI', '8918204738', '89, Boylston Street');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('209', 'SAMPADA', '9127382632', '90, Forest Hill Street');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('210', 'AMRUTHA', '7384729372', '91, Beacon Street');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('211', 'LUCKY', '2638492738', '92, Brookline Ave');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('212', 'LIAM', '2738492230', '93, Park Drive ');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('213', 'HARRY', '2639503829', '94, Riverway');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('214', 'AKSHITA', '6475935102', '95, Fenway ');

INSERT INTO "ADMIN123"."MANAGER"

VALUES('215', 'NEESON', '7392519302', '96, Dorchester Avenue ');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('216', 'DAVID', '6382715302', '97, Tremont Street');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('217', 'DEW', '5382619275', '98, Huntington Ave ');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('218', 'SMITH', '7263826283', '99, Boylston Street');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('219', 'CLARK', '1826336485', '100, Beacon Street');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('220', 'ROBERT', '7283749374', '101, Brookline Ave ');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('221', 'DREW', '8263947394', '102, Fenway');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('222', 'THOMAS', '8348374930', '103, Forest Hill Street ');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('223', 'JOSHUA', '8374927394', '104, Washington Street');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('224', 'PETER', '6293849530', '105, Townsend Street');

INSERT INTO "ADMIN123"."MANAGER"
VALUES('225', 'ANDREW', '7283749370', '106, Harvard Street');

-- TENANTS TABLE INSERT STATEMENTS

INSERT INTO "ADMIN123"."TENANTS"
VALUES('101', 'T_SMITH', '41, Juniper Street #1', '5231234561');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('102', 'T_SNOOP', '42, Forest Hill Street #1', '5232345672');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('103', 'T_AMELIA', '43, Saint Alphnosus #1', '5233456783');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('104', 'T_DOUG', '44, Harvard Street #1', '5234567894');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('105', 'T_LIAM', '45, Columbia Street #1', '5235679005');

```sql
INSERT INTO "ADMIN123"."TENANTS"
VALUES('106', 'T_NIKKI', '41, Juniper Street #2', '5236790116');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('107', 'T_OLIVIA', '43, Saint Alphnosus #2', '5237901227');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('108', 'T_AVA', '43, Saint Alphnosus #3', '5239012338');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('109', 'T_MAGGIE', '44, Harvard Street #2', '5239179379');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('110', 'T_TOM', '45, Columbia Street #2', '5239494835');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('111', 'T_SOPHIA', '41, Juniper Street #3', '5239475042');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('112', 'T_ROCKY', '46, Tremont Street #1', '5239473044');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('113', 'T_KEVIN', '44, Harvard Street #3', '5239384035');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('114', 'T_SAMPADA', '43, Saint Alphnosus #2', '5231738283');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('115', 'T_AMRUTHA', '41, Juniper Street #4', '5231738490');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('116', 'T_DEV', '45, Columbia Street #3', '5237825323');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('117', 'T_NICKY', '43, Saint Alphnosus #3', '5230193694');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('118', 'T_JEON', '41, Juniper Street #5', '5239018364');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('119', 'T_MIA', '42, Forest Hill Street #2', '5231048302');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('120', 'T_HARPER', '46, Tremont Street #2', '5231038456');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('121', 'T_AKSHITA', '43, Saint Alphnosus #4', '5230163827');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('122', 'T_NOAH', '42, Forest Hill Street #3', '5231937434');
```

INSERT INTO "ADMIN123"."TENANTS"
VALUES('123', 'T_LUCAS', '46, Tremont Street #3', '5231038434');

INSERT INTO "ADMIN123"."TENANTS"
VALUES('124', 'T_VAISHNAVI', '42, Forest Hill Street #4', '5231094833');

– PROPERTY TABLE INSERT STATEMENTS

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('51', '201', '2', 'ARYA', '11, Juniper Street ');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('52', '202', '1', 'ROHAN', '12, Forest Hill Street ');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('53', '203', '3', 'NICK', '13, Saint Alphonsus');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('54', '204', '1', 'BROWN', '14, Harvard Street');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('55', '205', '1', 'SURYA', '15, Columbia Street');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('56', '206', '1', 'JOHN', '16, Huntington Ave');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('57', '207', '2', 'ISABELLE', 'Highland Ave');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('58', '208', '1', 'NINA', '35, Linwood sq');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('59', '209', '3', 'STEFAN', '102 B , Millmont St');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('60', '210', '2', 'DAMON', '158, Dewitt Dr');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('61', '211', '1', 'BRIAN', '2311 , Vernon St');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('62', '212', '2', 'PAUL', '35, Dade st');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('63', '213', '4', 'KEVIN', '16, Taber St');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('64', '214', '2', 'EMILY', '15, Shabazz wy');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('65', '215', '1', 'DAKOTA', '49, Dubois St');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('66', '216', '2', 'LILY', '206 , Prescott St');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('67', '217', '1', 'HARRY', '57, Hampden St');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('68', '218', '4', 'AMANDA', '21, Warren Pl');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('69', '219', '2', 'RICHARD', '3, Greenville St');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('70', '220', '1', 'JESSICA', '7, Brad Ave');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('71', '221', '1', 'SUSAN', '1117, Renfrew St');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('72', '222', '1', 'JENNIFER', '21, Buffalo St');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('73', '223', '2', 'MARRY', '4, Moreland St');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('74', '224', '3', 'SARAH', '26, Dabney Pl');

INSERT INTO "ADMIN123"."PROPERTY"
VALUES('75', '225', '1', 'CAROL', '162, Rockville Park');

-- OWNER TABLE INSERT STATEMENT

INSERT INTO "ADMIN123"."OWNER"
VALUES('1', '51', '201', 'ARYA', '7895263890', '39, Juniper Street ');

INSERT INTO "ADMIN123"."OWNER"
VALUES('2', '52', '202', 'ROHAN', '6372934749', '106, Forest Hill Street');

INSERT INTO "ADMIN123"."OWNER"
VALUES('3', '53', '203', 'NICK', '5647920237', '75, Saint Alphonsus');

INSERT INTO "ADMIN123"."OWNER"
VALUES('4', '54', '204', 'BROWN', '7896238165', '54, Harvard Street');

INSERT INTO "ADMIN123"."OWNER"
VALUES('5', '55', '205', 'SURYA', '5602846710', '36, Columbia Street');

INSERT INTO "ADMIN123"."OWNER"
VALUES('6', '56', '206', 'JOHN', '5764581467', '42, Huntington Ave');

INSERT INTO "ADMIN123"."OWNER"
VALUES('7', '57', '207', 'ISABELLE', '6720192837', '16, Park street ');

INSERT INTO "ADMIN123"."OWNER"
VALUES('8', '58', '208', 'NINA', '7980124309', '102, Blossom street');

INSERT INTO "ADMIN123"."OWNER"
VALUES('9', '59', '209', 'STEFAN', '6781029542', '32, Beverly Street');

INSERT INTO "ADMIN123"."OWNER"
VALUES('10', '60', '210', 'DAMON', '8402301374', '40, Boylston street');

INSERT INTO "ADMIN123"."OWNER"
VALUES('11', '61', '211', 'BRIAN', '6012983710', '288, Walnut st');

INSERT INTO "ADMIN123"."OWNER"
VALUES('12', '62', '212', 'PAUL', '5012981029', '15, New Sudbury st');

INSERT INTO "ADMIN123"."OWNER"
VALUES('13', '63', '213', 'KEVIN', '4029018401', '332, Nahat Rd');

INSERT INTO "ADMIN123"."OWNER"
VALUES('14', '64', '214', 'EMILY', '5019285012', '51, Inman St');

INSERT INTO "ADMIN123"."OWNER"
VALUES('15', '65', '215', 'DAKOTA', '5010295018', '133, Massachusetts ave');

INSERT INTO "ADMIN123"."OWNER"
VALUES('16', '66', '216', 'LILY', '6380275690', '70, Albony st');

INSERT INTO "ADMIN123"."OWNER"
VALUES('17', '67', '217', 'HARRY', '6230759403', '200, Clarondon St');

INSERT INTO "ADMIN123"."OWNER"
VALUES('18', '68', '218', 'AMANDA', '3209471967', '601, Washington St');

INSERT INTO "ADMIN123"."OWNER"
VALUES('19', '69', '219', 'RICHARD', '4980217390', '1, City Hall Sq');

INSERT INTO "ADMIN123"."OWNER"
VALUES('20', '70', '220', 'JESSICA', '5730129483', '23, Warren St');

INSERT INTO "ADMIN123"."OWNER"
VALUES('21', '71', '221', 'SUSAN', '5634095810', '70, Elmwood St');

INSERT INTO "ADMIN123"."OWNER"

VALUES('22', '72', '222', 'JENNIFER', '9822592686', '44, Lambert St');

INSERT INTO "ADMIN123"."OWNER"
VALUES('23', '73', '223', 'MARRY', '9552231150', '46, Logan St');

INSERT INTO "ADMIN123"."OWNER"
VALUES('24', '74', '224', 'SARAH', '9657773550', '108, Norfolk St');

INSERT INTO "ADMIN123"."OWNER"
VALUES('25', '75', '225', 'CAROL', '9822216732', '59,Madison Park Ct');

-- UNIT TABLE INSERT STATEMENTS

INSERT INTO "ADMIN123"."UNIT"
VALUES('5101', '101', '1', '201', '2500','ARYA', '11, Juniper Street #1');

INSERT INTO "ADMIN123"."UNIT"
VALUES('5201', '102', '2', '202', '3000','ROHAN', '12, Forest Hill Street #1');

INSERT INTO "ADMIN123"."UNIT"
VALUES('5301', '103', '3', '203', '3500','NICK', '13, Saint Alphnosus #1');

INSERT INTO "ADMIN123"."UNIT"
VALUES('5401', '104', '4', '204', '4000','BROWN', '14, Harvard Street #1');

INSERT INTO "ADMIN123"."UNIT"
VALUES('5501', '105', '5', '205', '4500','SURYA', '15, Columbia Street #1');

INSERT INTO "ADMIN123"."UNIT"
VALUES('5102', '106', '1', '201', '2500','ARYA', '11, Juniper Street #2');

INSERT INTO "ADMIN123"."UNIT"
VALUES('5302', '107', '3', '203', '3000','ROHAN', '13, Saint Alphnosus #2');

INSERT INTO "ADMIN123"."UNIT"
VALUES('5303', '108', '3', '203', '3000','ROHAN', '13, Saint Alphnosus #3');

INSERT INTO "ADMIN123"."UNIT"
VALUES('5601', '6', '206', '5000','JOHN', '42, Huntington Ave #1');

INSERT INTO "ADMIN123"."UNIT"
VALUES('5701', '109', '7', '207', '2000','ISABELLE', 'Highland Ave #1');

INSERT INTO "ADMIN123"."UNIT"
VALUES('5702', '110', '7', '207', '2000','ISABELLE', 'Highland Ave #2');

INSERT INTO "ADMIN123"."UNIT"
VALUES('5801', '111', '8', '208', '3000','NINA', '35, Linwood Sq #1');

INSERT INTO "ADMIN123"."UNIT"

VALUES('5901', '112', '9', '209', '2000','STEFAN', '102 B , Millmont St #1');

INSERT INTO "ADMIN123"."UNIT"
VALUES('5902', '9', '209', '2000','STEFAN', '102 B , Millmont St #2');

INSERT INTO "ADMIN123"."UNIT"
VALUES('5903', '113', '9', '209', '2000','STEFAN', '102 B , Millmont St #3');

INSERT INTO "ADMIN123"."UNIT"
VALUES('6001', '10', '210', '3500','DAMON', '158, Dewitt Dr #1');

INSERT INTO "ADMIN123"."UNIT"
VALUES('6002', '114', '10', '210', '3500','DAMON', '158, Dewitt Dr #2');

INSERT INTO "ADMIN123"."UNIT"
VALUES('6101', '11', '211', '4000','BRIAN', '2311 , Vernon St #1');

INSERT INTO "ADMIN123"."UNIT"
VALUES('6102', '115', '11', '211', '4000','BRIAN', '2311 , Vernon St #2');

INSERT INTO "ADMIN123"."UNIT"
VALUES('6103', '116', '11', '211', '4000','BRIAN', '2311 , Vernon St #3');

INSERT INTO "ADMIN123"."UNIT"
VALUES('6201', '117', '12', '212', '4500','PAUL', '35, Dade St #1');

INSERT INTO "ADMIN123"."UNIT"
VALUES('6202', '118', '12', '212', '4500','PAUL', '35, Dade St #2');

INSERT INTO "ADMIN123"."UNIT"
VALUES('6301', '119', '13', '213', '5500','KEVIN', '16, Taber St #1');

INSERT INTO "ADMIN123"."UNIT"
VALUES('6302', '120', '13', '213', '5500','KEVIN', '16, Taber St #2');

INSERT INTO "ADMIN123"."UNIT"
VALUES('6303', '121', '13', '213', '5500','KEVIN', '16, Taber St #3');

INSERT INTO "ADMIN123"."UNIT"
VALUES('6304', '122', '13', '213', '5500','KEVIN', '16, Taber St #4');

INSERT INTO "ADMIN123"."UNIT"
VALUES('6401', '123', '14', '214', '3000','EMILY', '15, Shabazz St #1');

INSERT INTO "ADMIN123"."UNIT"
VALUES('6402', '124', '14', '214', '3000','EMILY', '15, Shabazz St #2');

-- MAINTENANCE TABLE INSERT STATEMENTS

INSERT INTO "ADMIN123"."MAINTENANCE"

VALUES('401', '5101', '2500', '5231234561', '01/01/2022', '09/01/2022','PLUMBING');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('402', '5201', '3000', '5232345672', '01/01/2022', '03/01/2022','ELECTRICIAN');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('403', '5301', '3500', '5233456783', '02/01/2022', '05/01/2022','WATER LEAKAGES');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('404', '5401', '4000', '5234567894', '03/01/2022', '04/01/2022','PEST CONTROL');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('405', '5501', '4500', '5235679005', '04/01/2022', '04/01/2022','PLUMBING');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('406', '5102', '2500', '5236790116', '05/01/2022', '05/01/2022','FIRE ALARM');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('407', '5302', '3000', '5237901227', '06/01/2022', '07/02/2022','PAINTING ROOFTOP');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('408', '5303', '3000', '5239012338', '07/01/2022', '09/01/2022','GARDENING');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('409', '5601', '5000', '5239179379', '01/03/2022', '02/03/2022','WATER LEAKAGES');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('410', '5101', '2500', '5239494835', '15/03/2022', '16/03/2022','PLUMBING');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('411', '5301', '3500', '5239475042', '22/03/2022', '23/03/2022','FIRE ALARM');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('412', '5303', '3000', '5239473044', '28/03/2022', '29/03/2022','ELECTRICIAN');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('413', '5201', '3000', '5239384035', '09/04/2022', '10/04/2022','WATER LEAKAGES');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('414', '5102', '2500', '5231738283', '10/04/2022', '15/04/2022','GARDENING');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('415', '5301', '3500', '5231738490', '17/04/2022', '01/05/2022', 'PAINTING ROOFTOP');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('416', '5201', '3000', '5237825323', '26/04/2022', '27/04/2022','PLUMBING');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('417', '5102', '2500', '5230193694', '01/05/2022', '01/05/2022','WATER LEAKAGES');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('418', '5303', '3000', '5239018364', '01/05/2022', '01/05/2022','FIRE ALARM');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('419', '5102', '2500', '5231048302', '22/05/2022', '22/05/2022','WATER LEAKAGES');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('420', '5301', '3500', '5231038456', '01/06/2022', '02/06/2022','PEST CONTROL');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('421', '5301', '3500', '5230163827', '12/06/2022', '13/06/2022','ELECTRICIAN');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('422', '5201', '3000', '5231937434', '25/06/2022','26/06/2022','PLUMBING');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('423', '5102', '2500', '5231038434', '30/06/2022','01/07/2022','WATER LEAKAGES');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('424', '5101', '2500', '5231094833', '12/10/2022','15/10/2022','GARDENING');

INSERT INTO "ADMIN123"."MAINTENANCE"
VALUES('425', '5303', '3000', '5237855334', '07/12/2022','01/01/2023','PAINTING ROOFTOP');

--LEASE TABLE INSERT STATEMENTS

INSERT INTO "ADMIN123"."LEASE"
VALUES('20001','5101','7500','ARYA','6177869876','01/01/2022','01/01/2023','101');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20002','5201','9000','ROHAN','8575679876','01/02/2022','01/02/2023','102');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20003','5301','10500','NICK','6172345678','01/03/2022','01/03/2023','103');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20004','5401','12000','BROWN','4162345367','01/04/2022','01/04/2023','104');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20005','5501','13500','SURYA','8575761846','01/05/2022','01/05/2023','105');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20006','5102','7500','ARYA','6177869876','01/06/2022','01/06/2023','106');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20007','5302','9000','ROHAN','6172345678','01/07/2022','01/07/2023','107');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20008','5303','9000','ROHAN','6172345678','01/08/2022','01/08/2023','108');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20009','5701','6000','ISABELLE','9182901820','01/09/2022','01/09/2023','109');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20010','5702','6000','ISABELLE','9182901820','01/10/2022','01/10/2023','110');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20011','5801','9000','NINA','8918204738','01/11/2022','01/11/2023','111');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20012','5901','6000','STEFAN','9127382632','01/12/2022','01/12/2023','112');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20013','5903','6000','STEFAN','9127382632','01/01/2023','01/01/2024','113');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20014','6002','10500','DAMON','7384729372','01/02/2023','01/02/2024','114');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20015','6102','12000','BRIAN','2638492738','01/03/2023','01/03/2024','115');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20016','6103','12000','BRIAN','2638492738','01/04/2023','01/04/2024','116');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20017','6201','13500','PAUL','2738492230','01/05/2023','01/05/2024','117');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20018','6202','13500','PAUL','2738492230','01/06/2023','01/06/2024','118');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20019','6301','16500','KEVIN','2639503829','01/07/2023','01/07/2024','119');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20020','6302','16500','KEVIN','2639503829','01/08/2023','01/08/2024','120');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20021','6303','16500','KEVIN','2639503829','01/09/2023','01/09/2024','121');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20022','6304','16500','KEVIN','2639503829','01/10/2023','01/10/2024','122');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20023','6401','9000','EMILY','6475935102','01/11/2023','01/11/2024','123');

INSERT INTO "ADMIN123"."LEASE"
VALUES('20024','6402','9000','EMILY','6475935102','01/12/2023','01/12/2024','124');

VIEWS :

-- 1. How many units does the owner have?

```
SELECT O.OWNER_ID, P.PROPERTY_ID, P.UNIT_COUNT AS NO_OF_UNITS_OWNER_HAS
FROM OWNER O JOIN PROPERTY P ON P.PROPERTY_ID = O.PROPERTY_ID;
```

-- 2. How many units does the manager assigned to that particular owner?

```
SELECT M.MANAGER_ID, COUNT(U.UNIT_ID) AS NO_OF_UNITS
FROM MANAGER M JOIN UNIT U ON M.MANAGER_ID = U.MANAGER_ID
GROUP BY M.MANAGER_ID;
```

-- 3. How many units are vacant?

```
SELECT * FROM UNIT WHERE TENANT_ID IS NULL;
```

-- 4. How much revenue does the owner have own on a single property for the first month, or as a whole by end of the year?

```
SELECT          DISTINCT(O.PROPERTY_ID),          SUM(L.LEASE_AMOUNT)          AS
REVENUE_EARNED_BY_OWNER
FROM UNIT U, LEASE L, OWNER O
WHERE    U.UNIT_ID   =   L.UNIT_ID   AND   O.OWNER_ID   =   U.OWNER_ID   AND
LEASE_START_DATE IS NOT NULL
GROUP       BY       O.PROPERTY_ID       ORDER       BY       O.PROPERTY_ID,
REVENUE_EARNED_BY_OWNER;
```

-- 5. How long the tenant lease last for?

```
SELECT   T.TENANT_ID,   L.LEASE_ID,   (L.LEASE_END_DATE-L.LEASE_START_DATE)   AS
DURATION_OF_LEASE_DAYS
FROM TENANTS T JOIN LEASE L ON T.TENANT_ID = L.TENANT_ID;
```

-- 6. How many maintenance issues are reported?

```
SELECT COUNT(MAIN_TYPE) FROM MAINTENANCE WHERE MAIN_TYPE IS NOT NULL;
```

-- 7. How many maintenance issues RESOLVED?

```
SELECT MAIN_TYPE, 'RESOLVED' AS STATUS  FROM MAINTENANCE WHERE MAIN_TYPE
IS NOT NULL AND MAIN_END_DATE < CURRENT_DATE;
```

PACKAGES :

– Create Declaration Statement to create a package MANAGE_MAINTENANCE with ADD_MAINTENANCE and ADD_MAINTENANCE_MANAGER stored procedure

```
create or replace PACKAGE MANAGE_MAINTENANCE IS
PROCEDURE ADD_MAINTENANCE (
    IN_MAIN_ID NUMBER,
    IN_UNIT_ID NUMBER,
    IN_MAIN_AMOUNT NUMBER,
    IN_TENANT_CONTACT NUMBER,
    IN_MAIN_START_DATE DATE,
    IN_MAIN_TYPE VARCHAR2 );

PROCEDURE ADD_MAINTENANCE_MANAGER (
    IN_MAIN_AMOUNT NUMBER,
    IN_MAIN_END_DATE DATE
    );
END MANAGE_MAINTENANCE;
/
```

– Create Declaration Statement to create a package MANAGE_UNITS with ADD_UNITS stored procedure

```
create or replace PACKAGE MANAGE_UNITS IS

PROCEDURE ADD_UNITS(IN_UNIT_ID NUMBER,
            IN_OWNER_ID NUMBER,
            IN_MANAGER_ID NUMBER,
            IN_UNIT_RENT NUMBER,
            IN_UNIT_OWNER VARCHAR2,
            IN_UNIT_ADDRESS VARCHAR2
            ) ;
END MANAGE_UNITS;
/
```

STORED PROCEDURE :

– To create a ADD_MAINTENANCE stored procedure

```
create or replace PROCEDURE ADD_MAINTENANCE (
            IN_MAIN_ID NUMBER,
            IN_UNIT_ID NUMBER,
            IN_TENANT_CONTACT NUMBER,
            IN_MAIN_START_DATE DATE,
            IN_MAIN_TYPE VARCHAR2
            )
```

```
IS
 INVALID_INPUTS EXCEPTION;

BEGIN
   IF (IN_MAIN_ID IS NULL
   OR IN_UNIT_ID IS NULL
      OR IN_TENANT_CONTACT IS NULL
      OR IN_MAIN_START_DATE IS NULL
      OR IN_MAIN_TYPE IS NULL
       )
   THEN
    RAISE INVALID_INPUTS;
   END IF;

INSERT INTO MAINTENANCE (
         MAIN_ID,
         UNIT_ID,
         TENANT_CONTACT,
         MAIN_START_DATE,
         MAIN_TYPE
       ) VALUES (
        IN_MAIN_ID,
      IN_UNIT_ID,
      IN_TENANT_CONTACT,
      IN_MAIN_START_DATE,
      IN_MAIN_TYPE
      );


EXCEPTION
WHEN INVALID_INPUTS
THEN
 --RAISE INVALID_INPUTS;
 raise_application_error (-20091,'INPUTS CANNOT BE NULL');
--THEN DBMS_OUTPUT.PUT_LINE ('INPUTS ARE NOT VALID');
-- END;
END ADD_MAINTENANCE;
/
```

– To run/execute a ADD_MAINTENANCE stored procedure

```
EXEC ADD_MAINTENANCE (426,5303,'5273681758','03/DEC/2022','GARDENING');
EXEC ADD_MAINTENANCE (427,5101,'5273687159','04/DEC/2022','FIRE ALARM');
```


– To create a ADD_MAINTENANCE_MANAGER stored procedure

```
create or replace PROCEDURE ADD_MAINTENANCE_MANAGER (
         IN_MAIN_AMOUNT NUMBER,
         IN_MAIN_END_DATE DATE
```

```
            )
IS
    INVALID_INPUTS EXCEPTION;
    V_MAIN_ID MAINTENANCE.MAIN_ID%TYPE;
    V_MAIN_START_DATE MAINTENANCE.MAIN_START_DATE%TYPE;
    V_MAIN_TYPE MAINTENANCE.MAIN_TYPE%TYPE;
BEGIN

    SELECT MAIN_ID,
    MAIN_START_DATE,
    MAIN_TYPE

    INTO V_MAIN_ID,
    V_MAIN_START_DATE,
    V_MAIN_TYPE

    FROM ADMIN123.MAINTENANCE

    WHERE MAIN_END_DATE IS NULL;

    IF (IN_MAIN_AMOUNT IS NULL
    OR IN_MAIN_END_DATE IS NULL
        )
    THEN
     RAISE INVALID_INPUTS;
    END IF;

    INSERT INTO MAINTENANCE (
            MAIN_AMOUNT,
            MAIN_END_DATE
          ) VALUES (
        IN_MAIN_AMOUNT,
        IN_MAIN_END_DATE
        ) ;

EXCEPTION WHEN INVALID_INPUTS
THEN
 --RAISE INVALID_INPUTS;
 raise_application_error (-20091,'INPUTS CANNNOT BE NULL');
--THEN DBMS_OUTPUT.PUT_LINE ('INPUTS ARE NOT VALID');
-- END;
END ADD_MAINTENANCE_MANAGER;
/
```

– To run/execute a ADD_MAINTENANCE_MANAGER stored procedure

```
EXEC ADD_MAINTENANCE_MANAGER ('3500','05/DEC/2022');
EXEC ADD_MAINTENANCE_MANAGER ('4500','05/DEC/2022');
```

– To create a ADD_UNITS stored procedure

```
create or replace PROCEDURE ADD_UNITS (IN_UNIT_ID NUMBER,

             IN_OWNER_ID NUMBER,
             IN_MANAGER_ID NUMBER,
             IN_UNIT_RENT NUMBER,
             IN_UNIT_OWNER VARCHAR2,
             IN_UNIT_ADDRESS VARCHAR2
             )
IS
 INVALID_INPUTS EXCEPTION;

BEGIN
  IF (IN_UNIT_ID IS NULL

     OR IN_OWNER_ID IS NULL
     OR IN_MANAGER_ID IS NULL
     OR IN_UNIT_RENT IS NULL
     OR IN_UNIT_OWNER IS NULL
     OR IN_UNIT_ADDRESS IS NULL )
   THEN
    RAISE INVALID_INPUTS;
   END IF;

INSERT INTO UNIT (
          UNIT_ID,

          OWNER_ID,
          MANAGER_ID,
          UNIT_RENT,
          UNIT_OWNER,
          UNIT_ADDRESS
        ) VALUES (
        IN_UNIT_ID,

        IN_OWNER_ID,
        IN_MANAGER_ID,
        IN_UNIT_RENT,
        IN_UNIT_OWNER,
        IN_UNIT_ADDRESS
        );


EXCEPTION
WHEN INVALID_INPUTS
THEN
 --RAISE INVALID_INPUTS;
 raise_application_error (-20091,'VALUES CANNOT BE NULL');
--THEN DBMS_OUTPUT.PUT_LINE ('INPUTS ARE NOT VALID');
```

```
-- END;
END ADD_UNITS;
/
```

– To run/execute a ADD_UNITS stored procedure

```
EXEC ADD_UNITS(6501,15,215,'Dakota','49, Dubois St #1');
EXEC ADD_UNITS(6601,16,216,'Lily','206 , Prescott St #1');
```

FUNCTIONS :

– To create a GET_AVG_UNIT_PRICE FUNCTION

```
create or replace FUNCTION GET_AVG_UNIT_PRICE
RETURN NUMBER
IS
        V_AVG_UNIT_PRICE NUMBER;
        BEGIN
        SELECT AVG(UNIT_RENT)
        INTO V_AVG_UNIT_PRICE
        FROM UNIT;
        RETURN V_AVG_UNIT_PRICE;
    EXCEPTION WHEN OTHERS THEN
    DBMS_OUTPUT.PUT_LINE(SQLCODE);
    DBMS_OUTPUT.PUT_LINE('DATA NOT IN TABLE');
END;
/
```

– To call the GET_AVG_UNIT_PRICE FUNCTION

```
SET SERVEROUTPUT ON;
DECLARE
P_AVG NUMBER;
BEGIN
P_AVG := ADMIN123.GET_AVG_UNIT_PRICE;
DBMS_OUTPUT.PUT_LINE ('P_AVG     ' || P_AVG );
END;
/
```

– To create a GET_UNRESOLVED_ISSUES FUNCTION

```
create or replace FUNCTION GET_UNRESOLVED_ISSUES
RETURN NUMBER
IS
        V_UNRESOLVED_ISSUES NUMBER;

        BEGIN
        SELECT COUNT(MAIN_END_DATE)
```

```
        INTO V_UNRESOLVED_ISSUES
        FROM MAINTENANCE
        WHERE MAIN_TYPE IS NOT NULL AND MAIN_END_DATE > CURRENT_DATE;
        RETURN V_UNRESOLVED_ISSUES;
    EXCEPTION WHEN OTHERS THEN
    DBMS_OUTPUT.PUT_LINE(SQLCODE);
    DBMS_OUTPUT.PUT_LINE('DATA NOT IN TABLE');
END;
/
```

– To call the GET_UNRESOLVED_ISSUES FUNCTION

```
SET SERVEROUTPUT ON;
DECLARE
P_UNRES NUMBER;
BEGIN
P_UNRES := ADMIN123.GET_UNRESOLVED_ISSUES;
DBMS_OUTPUT.PUT_LINE ('P_UNRES     ' || P_UNRES );
END;
/
```

– To create a GET_VACANT_UNITS FUNCTION

```
create or replace FUNCTION GET_VACANT_UNITS
    RETURN NUMBER
    IS
        V_VACANT_UNITS NUMBER;
        BEGIN
        SELECT COUNT(UNIT_ID)
        INTO V_VACANT_UNITS
        FROM UNIT
        WHERE TENANT_ID IS NULL;
    RETURN V_VACANT_UNITS;
    EXCEPTION WHEN OTHERS THEN
    DBMS_OUTPUT.PUT_LINE(SQLCODE);
    DBMS_OUTPUT.PUT_LINE('DATA NOT IN TABLE');
END;
```

– To call the GET_VACANT_UNITS FUNCTION

```
SET SERVEROUTPUT ON;
    DECLARE
        P_VC NUMBER;
        BEGIN
            P_VC := ADMIN123.GET_VACANT_UNITS;
        DBMS_OUTPUT.PUT_LINE('P_VC ' || P_VC);
END;
/
```

INDEXES :

– To create a index_lease on lease table

create index index_lease on lease(LEASE_ID,
UNIT_ID,
LEASE_AMOUNT,
OWNER_NAME,
MANAGER_CONTACT,
LEASE_START_DATE,
LEASE_END_DATE,
TENANT_ID);

– To create a index_maintenace on maintenance table

create index index_maintenace on maintenance (MAIN_ID,UNIT_ID,MAIN_AMOUNT,
UNIT_CONTACT,
MAIN_START_DATE,
MAIN_END_DATE,
MAIN_TYPE,
MAIN_DIFF);

– To create a index_manager on manager table

create index index_manager on manager (MANAGER_ID,
MANAGER_NAME,
MANAGER_CONTACT,
MANAGER_ADDRESS);

– To create a index_owner on owner table

create index index_owner on owner (OWNER_ID,
PROPERTY_ID,
MANAGER_ID,
OWNER_NAME,
OWNER_CONTACT,
OWNER_ADDRESS);

– To create a index_property on property table

create index index_property on property (PROPERTY_ID,
MANAGER_ID,
UNIT_COUNT,
PROPERTY_OWNER,
PROPERTY_ADDRESS);

– To create a index_tenants on tenants table

create index index_tenants on tenants(TENANT_ID,

TENANT_NAME,
TENANT_ADDRESS,
TENANT_CONTACT);

– To create a index_unit on unit table

create index index_unit on unit (UNIT_ID,
TENANT_ID,
OWNER_ID,
MANAGER_ID,
UNIT_RENT,
UNIT_OWNER,
UNIT_ADDRESS);

TRIGGERS :

---To check if the there multiple tenants assigned to single unit
create or replace trigger check_property
before insert on unit for each row
declare
rowcount int;
begin
select count(*) into rowcount from unit where tenant_id = :NEW.tenant_id;
if rowcount<>0 then
  raise_application_error(-20001, 'Tenant_id already registered');
end if;
end;

--- To check the difference in main amount
create or replace trigger display_main_difference
before delete or insert or update on maintenance
for each row
when(NEW.UNIT_ID > 0)
DECLARE Main_diff number;
begin
Main_diff := :NEW.MAIN_AMOUNT - :OLD.MAIN_AMOUNT;
DBMS_OUTPUT.put_line('OLD MAIN_AMOUNT: ' || :OLD.MAIN_AMOUNT);
DBMS_OUTPUT.put_line('NEW MAIN_AMOUNT: ' || :NEW.MAIN_AMOUNT);
DBMS_OUTPUT.put_line('Maintenance difference: ' || main_diff);
end;

--- While updating/inserting/deleting maintenance table
create or replace trigger updating_maintenance
before delete or insert or update of main_id,unit_id, Tenant_contact, main_type, main_amount, main_start_date, main_end_date on maintenance
begin
case
when inserting then
dbms_output.put_line('Inserting into maintenance table');

```
when updating('unit_id') then
dbms_output.put_line('updating unit_id into maintenance table');
when updating('main_id') then
dbms_output.put_line('updating main_id into maintenance table');
when updating('tenant_contact') then
dbms_output.put_line('updating unit_contact into maintenance table');
when updating('main_type') then
dbms_output.put_line('updating main_type into maintenance table');
when updating('main_amount') then
dbms_output.put_line('updating main_amount into maintenance table');
when updating('main_start_date') then
dbms_output.put_line('updating main_start_date into maintenance table');
when updating('main_end_date') then
dbms_output.put_line('updating main_end_date into maintenance table');
when deleting then
dbms_output.put_line('Deleting');
end case;
end;
```