

-- drop table Property\_Service cascade constraints;

**-- 1) Using a create query, create the property service table. Ensure that primary key and foreign keys added. (Note: You must examine and see its connections to other tables) (3 points)**

```
create table Property_Service(  
    propertyserviceid number(5) not null,  
    propertyid number(5) not null,  
    serviceid number(5) not null,  
    servicedate date not null,  
    employeeid number(5) not null,  
    hoursworked number(5,2) not null,  
    constraint propertyserviceid_pk primary key(propertyserviceid)  
    constraint ownedproperty_propertyserviceid_fk foreign key(propertyid) references  
Owner_Property(propertyid),  
    constraint ggservice_propertyserviceid_fk foreign key(serviceid) references  
GG_Service(serviceid),  
    constraint employee5_propertyserviceid_fk foreign key(employeeid) references  
Employee5(employeeid),  
);
```

**-- 2) Create at least one insert query to the Property\_Service table. (2 points)**

```
Insert into Property_Service(propertyserviceid, propertyid, serviceid, servicedate, employeeid,  
hoursworked) values(1006, 36, 28, 05/15/2019, 4, 2.75);
```

```
insert into Property_Service(propertyserviceid, propertyid, serviceid, servicedate, employeeid,  
hoursworked) values(1001, 29, 29, 05/05/2019, 1, 4.5);
```

```
insert into Property_Service(propertyserviceid, propertyid, serviceid, servicedate, employeeid,  
hoursworked) values(1002, 31, 29, 05/08/2019, 2, 4.5);
```

**-- 3) Create at least one update query to the Property\_Service table (2 points)**

```
update Property_Service set hoursworked = 7 where propertyid = 36 and propertyserviceid =  
1006;
```

**-- 4) Retrieve the owner id, name, property id, property name and property city. Sort the results by owner name ascending. (2 points)**

```
select ownerid, concat(firstname, ' ', lastname) as name, propertyid, propertyname, propertycity  
from Owner_Table, Owned_Property order by 'ASC';
```

**-- 5) Retrieve the employees who worked on May 8, 2019 (You should also include the date in the query results). Include their first name, last name, the number of hours they worked, and the property name they worked at that time. (2 points)**

```
select  firstname,  lastname,  propertyname,  city,  hoursworked,  servicedate  from
Property_Service, Employee5, Owned_Property where servicedate To_Date('05/08/2019');
```

**-- 6) Using a set operator, show only the employees who did not work on May 8, 2019. Show the employee id, last name. (3 points)**

```
select  employeeid,  lastname  from  Employee5  intersect  select  employeeid  from
Property_Service;
```

**-- 7) Show the total hours accumulated per service. Show the service id, service description and the hours worked. (3 points)**

```
select      distinct(serviceid),      servicedescription,      count(hoursworked)      as
hoursaccumulatedperservice from Property_Service, GG_Service;
```

**-- 8) Display the total wage of all employees by computing the accumulated hours of their work and multiplying it with 25 dollars. Further filter the results by showing only those employees that have earned more than 125 dollars. Display the data according to the output below**

```
select distinct(employeeid), count(hoursworked) as totalHoursWorked, totalhourworked * 25 as
money from Employee5 where totalHoursWorked > 3;
```

**-- 10) Display the sum of the total hours per service id that are greater than average hours per service id. Your output should be similar to the one below: (3 points)**

```
select distinct(serviceid) count(hoursworked) as totalHoursWorked, avg(totalhourworked) as
avgHours from Property_Service where totalHoursWorked > avgHours;
```

**----- PL/SQL**

**-- 1) Create an anonymous block that will create a new table from existing tables. The new table will contain property id, property name and hours worked on that property. The new table should be furthered filtered to only contain those with hours worked that is more than 4.**

**From this new table, the anonymous block should display the minimum number of hours.  
(3 points)**

```
declare
  propertyid  number(5)
  propertyname varchar2(50)
  hoursworked number(5,2)
begin
  select
    propertyid into propertyid,
    propertyname into propertyname,
    hoursworked into hoursworked,
  from Property_Service, Owned_Property
end;
```

**-- 2 You will create a function and procedure for this number (8 points).**

**a) Create a function that will accept the number of hours and multiply it by 25. It will return the result of the computation.**

**b) Create a procedure that will call that function and display the total wage of**

**employees based on the total number of hours of an employee. Output will be similar to the one below:**

```
declare
  numOfHours  number(4)
begin
  select
    hoursworked into numOfHours,
    numOfHours = numOfHours * 25
  from Property_Service
end;
```