IT214
DATABASE MANAGEMENT SYSTEM

PROJECT SUBMISSION

Title: - Municipal Corporation

Select Queries

Team Details

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1. **Extract the Name, house number and society of the citizen who has a complaint regarding water management in area having pincode 398965.**

```
select citizen.f_name, citizen.house_no, citizen.society from citizen inner join
(select peoplehavecomplains.citizenid
from peoplehavecomplains
inner join
(select complaintid
from complains
where serviceid='1'
and cstatus='unsolved') as r1
on r1.complaintid=peoplehavecomplains.complaintid) as r2
on r2.citizenid=citizen.citizenid
where citizen.pincode='398965';
```

2. **extract the name and conta t no of the company-person whose construction is halted.**

```
select contactpersonname, contactno
from company
inner join ( select r3.company_name
rom (select r2.phaseno,r2.company_name
from (phase natural join construction) as r2
where r2.phasename='Halted') as r3) as r4
on company.companyname=r4.company_name;
```

3. **Extract the area with the money spent on public propert and arrange them in descending order**

```
select r1.pincode, SUM(r1.cost) as s from
(select p.pincode, c.constructionid, c.cost
from publicproperty as p
inner join costonconstruction as c
on p.established=c.constructionid) as r1
group by r1.pincode
order by s desc;
```

4. **Which department has complaints left unsolved or in progress? Also count the number of complaints**

```
select d.dname,count(r1.complaintid)
from department as d
inner join (select s.departmentid,c.cstatus,c.complaintid
from services as s
inner join complains as c
on s.serviceid=c.serviceid
where cstatus='unsolved' or cstatus='progress') as r1
```

```
on r1.departmentid=d.d_id
group by d.dname;
```

5. **Find out which employees have penalties? Also show their Citizen ID and Income.**

```
select c.citizenid,c.f_name, c.income, SUM(r2.amount)
from citizen as c
inner join (select r1.owner, r1.amounts
from employee as e
inner join (select pr.owner,p.propertyid,p.amount
from penalty as p
inner join property as pr
on pr.proid=p.propertyid) as r1
on r1.owner=e.citizenid ) as r2
on c.citizenid=r2.owner
group by c.f_name, c.citizenid, c.income;
```

6. **Find out which citizens have penalties? Also show their Citizen ID and Income, number of penalties and Total_Amount.**

```
select c.citizenid,c.f_name, c.income, count(r1.amount) as No_of_penalties,
SUM(r1.amount) as Total_Amount
from citizen as c
inner join (select pr.owner,p.propertyid,p.amount
from penalty as p
inner join property as pr
on pr.proid=p.propertyid) as r1
on c.citizenid=r1.owner
group by c.f_name, c.citizenid, c.income
order by No_of_penalties desc;
```

7. **Citizen who have taken Welfare schemes**

```
select
citizen.citizenid, citizen.f_name, citizen.L_name
from citizen natural
join taken where schemeid is not null;
```

8. **Number of complains services**

```
select r1.name,count(r1.complaintid)
from (services natural join complains)
as r1 group by r1.serviceid ;
```

9. Calculate the percentage of citizens have taken welfare scheme who are eligible

```
select schemeno,schemename,(et)*100/ee as ratio from
(
	select count(citizenid) as ee,schemeno,schemename from
	(
		select citizenid,EXTRACT(YEAR FROM age(cast(dob as date))) as
age,family_income from
		(
			select inc.citizenA,sum(income) as family_income
				from
				(
					(select citizenA,citizenB,income from
((select citizenA,citizenB from citizen join relatedto on citizenA=citizenID) as r1
join citizen on citizen.citizenid=r1.citizenb))
						union
					(select citizenid as citizenA,citizenid,income
from citizen as c1 natural join citizen as c2)
					)as inc
			group by inc.citizenA
		)
		as fc join citizen on fc.citizenA=citizenid
	)
	as f1 join welfare_scheme on (family_income < family_income_limit and
age > lowerage and age < upperage) group by schemeno
) as r11
natural join
(
	select count(citizenid) as et,schemeid as schemeno from taken group by
schemeid
) as r12
```

10. List all the departments with their yearly expenses.

```
select d.dname, r4.year, r4.cost
from department as d
inner join (select departmentid, year, cost
from (select r1.cost, s.departmentid, r1.year
from services as s
inner join (select r.resourceid, r.cost, ru.serviceid, r.year
from resourcesused as ru inner join costonresource as r
on r.resourceid=ru.resourceid) as r1
on r1.serviceid=s.serviceid) as r2
union
select departmentid, year, cost
from (select cc.cost, c.departmentid, cc.year
```

```
from construction as c
inner join costonconstruction as cc
on c.constructionid=cc.constructionid) as r3 ) as r4
on r4.departmentid=d.d_id
order by d.d_id,r4.year asc;
```

11. List all the departments with their over-all expenses.

```
select d.dname as Department, SUM(r4.cost) as Total_Expense
from department as d
inner join (select departmentid, year, cost
from (select r1.cost, s.departmentid, r1.year
from services as s
inner join (select r.resourceid, r.cost, ru.serviceid, r.year
from resourcesused as ru
inner join costonresource as r
on r.resourceid=ru.resourceid) as r1 on r1.serviceid=s.serviceid) as r2
union
select departmentid, year, cost
from (select cc.cost, c.departmentid, cc.year
from construction as c
inner join costonconstruction as cc
on c.constructionid=cc.constructionid) as r3 ) as r4
on r4.departmentid=d.d_id
group by d.dname;
```