

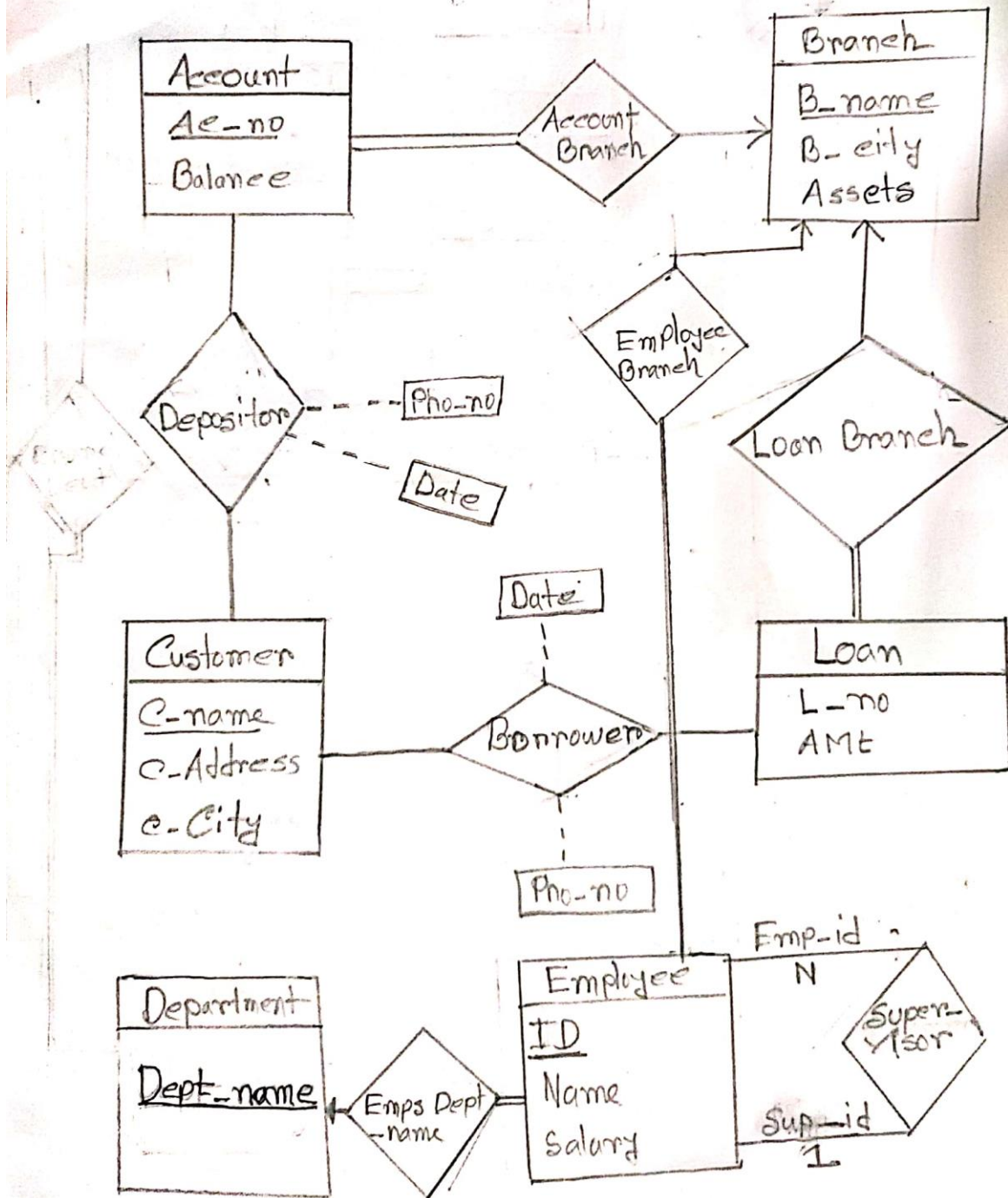
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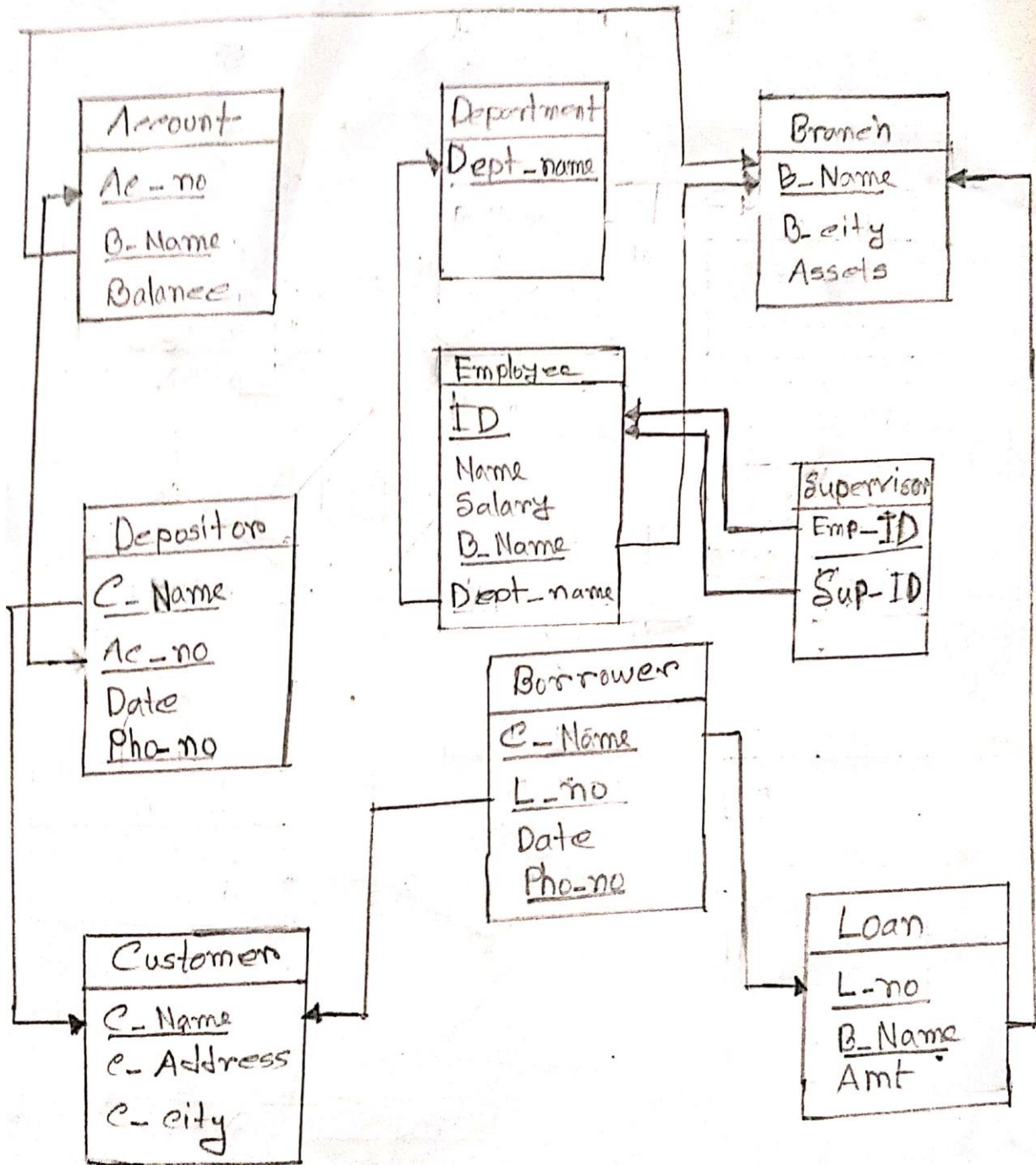
My project topic is Banking system.

A bank that has many branch and every branch has saparte customer .The customer can take loan and they can also deposit their money.This bank has many department in every branch and many employee work in the department.The employee also have supervisor who train them .

ER - Diagram



Schema Diagram



```
--find all employee in 'Inspection Department' dept with salary > 70000
```

```
select name,Salary from Employee  
where dept_name = 'Inspection Department'  
and Salary > 70000
```

100 %

Results Messages

	name	Salary
1	Benit	7000000
2	Tom	1340000

```
--Find the names of all employee who have a higher salary than some employee in 'Inspection Department'.
```

```
select distinct T.name ,T.Salary,T.Dept_name  
from Employee as T, Employee as S |  
where T.Salary > S.Salary and S.Dept_name = 'Inspection Department'
```

	name	Salary	Dept_name
1	Aurpa	60000	Management Services Department
2	Benit	7000000	Inspection Department
3	Jony	100000	Department of Administration and Personnel
4	Kaniz	68900	Management Services Department
5	Prosonjit	78989	Training Establishments
6	Tom	1340000	Inspection Department
7	Tylor	820000	Secretary's Department

```
--Find the names of all Customer whose name includes the substring "Sad".
```

```
select C_name  
from Customer  
where C_name like '%Sad%'
```

	C_name
1	Saddam
2	Sadik

--Find the Branch name and their length with their Account no and Balance which Branch name start with S or A

```
select B_name,len(B_name) as length,Ac_no,Balance from Account
where B_name like '[SA]%'
```

	B_name	length	Ac_no	Balance
1	Sutrapur	8	123456705	80000
2	Shagorika	9	123456767	70000
3	Ashulia	7	123456775	100000
4	Savar	5	123456789	900000

--Find the Branch name and their length with their Account no and Balance which Branch name start with 'SA' and end with 'AR'

```
select B_name,len(B_name) as length,Ac_no,Balance from Account
where B_name like 'SA%' and B_name like '%AR'
```

B_name	length	Ac_no	Balance
Savar	5	123456789	900000

--Find the name,address,city,branch name,loan no who take the loan and show their Branch name by Descending order

```
select C.C_name,C.C_Address,C.C_city,B.L_no,L.B_Name
from Customer as C,Borrower as B,Loan as L
where C.C_name=B.C_name and L.L_no=B.L_no
order by L.B_name Desc
```

	C_name	C_Address	C_city	L_no	B_Name
1	Ahanaf	57/5,Volagong	Shylet	127956748	Volagong
2	Rupa	sec-7,Uttara	Dhaka	153456745	Uttara
3	Sadik	sec-2,Sutrapur	Chittagong	133456705	Sutrapur
4	Saddam	8/7/3,Shagorika	Chittagong	199456767	Shagorika
5	Riaz	98/34,Savar	Dhaka	103456789	Savar
6	Rafi	5/9,Nawgone	Rajshahi	173456725	Nawgone
7	Roy	65/8,Bogura	Rajshahi	193456709	Bogura
8	Mehadi	7/2,Ashulia	Dhaka	113456775	Ashulia

--Find the customer name,Account no,Balance,Branch name who deposit in the bank and show their Branch name by Aescending order

```
select D.C_name,D.Ac_no,A.balance,A.B_name
from Account as A,Depositor as D
where A.Ac_no=D.Ac_no
order by A.B_name Asc
```

	C_name	Ac_no	balance	B_name
1	Mehadi	123456775	100000	Ashulia
2	Roy	123456709	500000	Bogura
3	Rafi	123456725	120000	Nawgone
4	Riaz	123456789	900000	Savar
5	Saddam	123456767	70000	Shagorika
6	Sadik	123456705	80000	Sutrapur
7	Rupa	123456745	85000	Uttara
8	Ahanaf	123456748	70000	Volagong

--Find the employee who work in savar or uttra

```
(select name from Employee where B_name='Savar')
union
(select name from Employee where B_name='Uttara')
```

	name
1	Benit
2	Kaniz
3	Tom
4	Tylor

--Find the department name which employee work in savar and uttara

```
(select Dept_name from Employee where B_name='Savar' )
intersect
(select Dept_name from Employee where B_name='Uttara')
```

	Dept_name
1	Inspection Department

--Find the department name which employee work in savar but not inuttara

```
(select Dept_name from Employee where B_name='Savar' )
except
(select Dept_name from Employee where B_name='Uttara')
```

	Dept_name
1	Secretary's Department

--Find the names and average salaries of all branches whose average salary is greater than 42000

```
select B_name, avg (Salary) as avg_salary
from Employee
group by B_name
having avg (Salary) > 42000;
```

	B_name	avg_salary
1	Ashulia	60000
2	Savar	3910000
3	Shagonika	50000
4	Sutrapur	78989
5	Uttara	704450
6	Volagong	100000

--Find names of Employee with salary greater than that of some (at least one) employee in the 'Management Services Department'.

```
select name
from Employee
where Salary > some (select Salary from Employee where Dept_name = 'Management Services Department')
```

	name
1	Benit
2	Tylor
3	Kaniz
4	Prosonjit
5	Jony
6	Tom

```
--find the employee name ,salaray whose supervisor is selim and their department should not be 'Training Establishments'
```

```
select e.Name,e.Salary
from Employee as e
where e.ID in(select s.Emp_ID from Supervisor as s where s.Sup_ID='106') and e.Dept_name <> 'Training Establishments'
```

	Name	Salary
1	Tylor	820000
2	Kaniz	68900
3	Jony	100000

```
--find the number of employee work each department in all branch
```

```
select dept_name,
( select count(*)
from Employee
where Department.dept_name = Employee.dept_name)
as num_Emp
from Department;
```

```
-- both query return same output
```

```
select dept_name,count(ID) as no_of_employee
from Employee
group by dept_name
```

	dept_name	num_Emp
1	Central Records and Documentation Centre	0
2	Department of Administration and Personnel	1
3	Information Technology Department	0
4	Inspection Department	3
5	Management Services Department	2
6	Premises Department	0
7	Secretary's Department	1
8	Training Establishments	1


```
--find the ID,name, salary of the employee and covert the salary as monthly salary
```

```
select ID,name,convert(float,Salary)/12 as monthly_salary from Employee
```

	ID	name	monthly_salary
1	101	Benit	583333.3333333333
2	102	Tylor	68333.33333333333
3	103	Aurpa	5000
4	104	Kaniz	5741.66666666667
5	105	Prosonjit	6582.41666666667
6	106	Selim	4166.66666666667
7	107	Jony	8333.33333333333
8	108	Tom	111666.666666667