# CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY
# DEVANG PATEL INSTITUTE OF ADVANCE TECHNOLOGY & RESEARCH

# COMPUTER SCIENCE & ENGINEERING

**Class: 4CSE1**
**Subject Name: Database Management System**
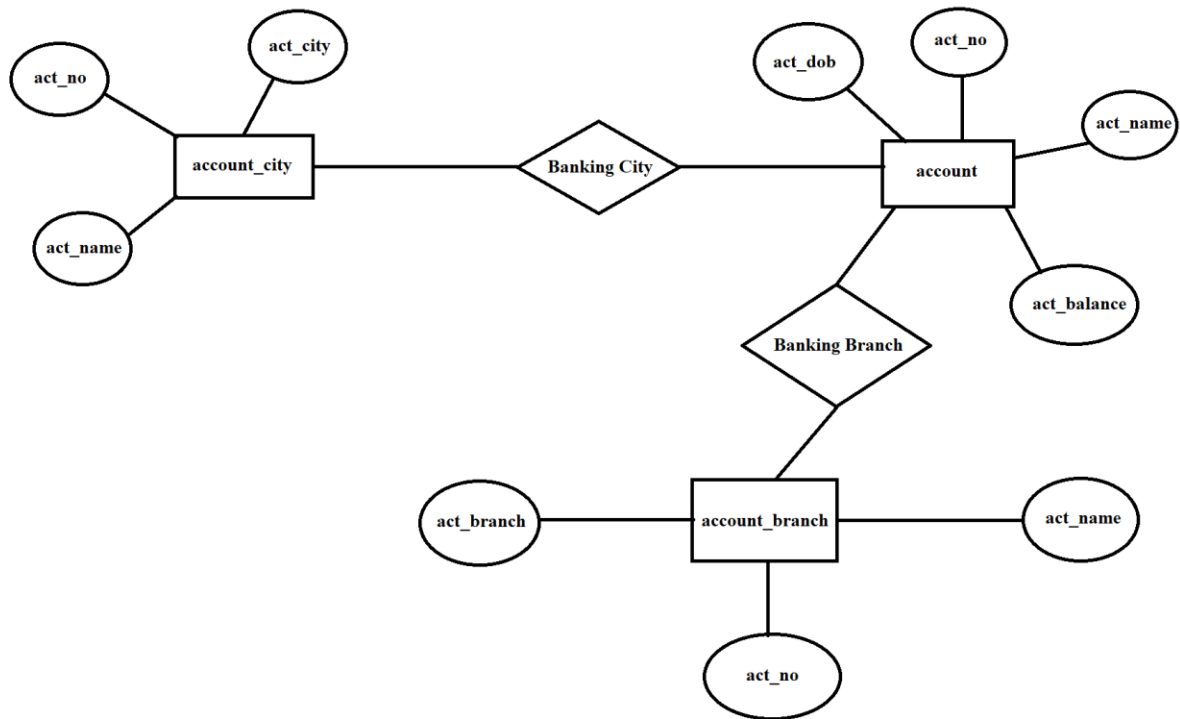**Semester: IV**
**Subject Code: CE246**
**Academic year: 2021-22**

**Mini Project Title:** **Transaction Management System**

**Group Members:** **Nisarg Chaniyara (ID-19DCS016)**

**Param Jani (ID-19DCS042)**

# ER Diagram For The Project

# Tables-Data Dictionary

## account table

# account_branch

# account_city





| ACT_NO | ACT_NAME | ACT_CITY |
|--------|----------|----------|
| 19DCS001 | Rajesh | Vadodara |
| 19DCS002 | Shyam | Bangalore |
| 19DCS003 | Bimal | Delhi |
| 19DCS004 | Neel | Mumbai |
| 19DCS005 | Tushar | Bhavnagar |
| 19DCS006 | Falguni | Mumbai |
| 19DCS007 | Parimal | Kolkata |
| 19DCS008 | Apu | Pune |
| 19DCS009 | Sheetal | Ahmedabad |
| 19DCS010 | Shiv | Hyderabad |

10 rows returned in 0.00 seconds          CSV Export

# Code Of Project

```
create table account(act_no varchar2(10), act_name varchar2(10), act_balance
number(10), act_dob date);

create table account_branch(act_no varchar2(10), act_name varchar2(10),
act_branch varchar2(10));

create table account_city(act_no varchar2(10), act_name varchar2(10), act_city
varchar2(10));

insert into account values('19DCS001','Rajesh','35000','12-JUL-2001');

insert into account values('19DCS002','Shyam','30000','05-NOV-1993');

insert into account values('19DCS003','Bimal','55000','12-DEC-1997');

insert into account values('19DCS004','Neel','46000','31-JAN-2000');

insert into account values('19DCS005','Tushar','37900','27-FEB-2002');

insert into account values('19DCS006','Falguni','35060','01-JUL-1998');

insert into account values('19DCS007','Parimal','12070','17-SEP-2001');

insert into account values('19DCS008','Apu','17800','14-JUN-1994');

insert into account values('19DCS009','Sheetal','65070','22-AUG-1995');

insert into account values('19DCS010','Shiv','35600','07-MAY-1999');

insert into account_branch values('19DCS001','Rajesh','Manjalpur');

insert into account_branch values('19DCS002','Shyam','MG Road');

insert into account_branch values('19DCS003','Bimal','Mayapuri');

insert into account_branch values('19DCS004','Neel','Borivali');

insert into account_branch values('19DCS005','Tushar','Ghogha');

insert into account_branch values('19DCS006','Falguni','Powai');

insert into account_branch values('19DCS007','Parimal','Dum Dum');

insert into account_branch values('19DCS008','Apu','Hinjewadi');
```

```
insert into account_branch values('19DCS009','Sheetal','Maninagar');

insert into account_branch values('19DCS010','Shiv','Gachibowli');

insert into account_city values('19DCS001','Rajesh','Vadodara');

insert into account_city values('19DCS002','Shyam','Bangalore');

insert into account_city values('19DCS003','Bimal','Delhi');

insert into account_city values('19DCS004','Neel','Mumbai');

insert into account_city values('19DCS005','Tushar','Bhavnagar');

insert into account_city values('19DCS006','Falguni','Mumbai');

insert into account_city values('19DCS007','Parimal','Kolkata');

insert into account_city values('19DCS008','Apu','Pune');

insert into account_city values('19DCS009','Sheetal','Ahmedabad');

insert into account_city values('19DCS010','Shiv','Hyderabad');


desc account;
desc account_branch;
desc account_city;


select * from account;
select * from account_branch;
select * from account_city;


DECLARE
xact_no account.act_no%type;
xact_balance account.act_balance%type;
```

```
opt number(1);

deposit number(10);

withdrawal number(10);


BEGIN

xact_no:= :Enter_Account_Number;

opt:= :1Deposit_2Withdrawal_3Balance;

select act_balance into xact_balance

from account

where act_no=xact_no ;


IF( opt = 1 ) THEN

deposit:= :Enter_Deposit_Amount;

update account

 set act_balance=act_balance+deposit

where act_no=xact_no ;


xact_balance :=xact_balance +deposit;

dbms_output.put_line('Rs. '||deposit||' has been creadited in your account');

dbms_output.put_line('Your final balance is Rs. '||xact_balance );


ELSIF( opt = 2 ) THEN

withdrawal:= :Enter_Withdrawal_Amount;

   IF ( withdrawal<=xact_balance ) THEN
```

```
   update account
    set act_balance=act_balance-withdrawal
   where act_no=xact_no ;


   xact_balance:=xact_balance -withdrawal;
   dbms_output.put_line('Rs. '||withdrawal||' has been debited in your account');
   dbms_output.put_line('Your final balance is Rs.'||xact_balance );


   ELSE
   dbms_output.put_line('Your withdrawal amount is greater than balance');
   dbms_output.put_line('Your transaction failed');
   dbms_output.put_line('Your final balance is Rs.'||xact_balance );
   END IF;
ELSE
dbms_output.put_line('Your balance is Rs. '||xact_balance );
END IF;


END;
```

# Screenshot of the Outputs

User: 19DCS042

Home > SQL > SQL Commands

Enter Bind Variables - Google Chrome

ⓘ 127.0.0.1:8080/apex/f?p=4500:138:2048065077455548:::

Submit

☑ Autocommit   Display  10

```
    ELSE
    dbms_output.put_line('Your withdrawal amount is greater than balance');
    dbms_output.put_line('Your transaction failed');
    dbms_output.put_line('Your final balance is Rs.'||xact_balance );
    END IF;
ELSE
dbms_output.put_line('Your balance is Rs. '||xact_balance );
END IF;


END;
```

| | |
|---|---|
| :ENTER_ACCOUNT_NUMBER | 19DCS003 |
| :1DEPOSIT_2WITHDRAWAL_3BALANCE | 1 |
| :ENTER_DEPOSIT_AMOUNT | 3500 |
| :ENTER_WITHDRAWAL_AMOUNT | 0 |

**Results**  Explain  Describe  Saved SQL  History

SQL Statement Running

```
    ELSE
    dbms_output.put_line('Your withdrawal amount is greater than balance');
    dbms_output.put_line('Your transaction failed');
    dbms_output.put_line('Your final balance is Rs.'||xact_balance );
    END IF;
ELSE
dbms_output.put_line('Your balance is Rs. '||xact_balance );
END IF;


END;
```

**Results  Explain  Describe  Saved SQL  History**

Rs. 3500 has been creadited in your account
Your final balance is Rs. 58500

1 row(s) updated.

0.05 seconds

User: 19DCS042

Home > SQL > SQL Commands

☑ Autocommit  Display 10 ▼

```
    ELSE
    dbms_output.put_line('Your withdrawal amount is greater than balance');
    dbms_output.put_line('Your transaction failed');
    dbms_output.put_line('Your final balance is Rs.'||xact_balance );
    END IF;
ELSE
dbms_output.put_line('Your balance is Rs. '||xact_balance );
END IF;

END;
```
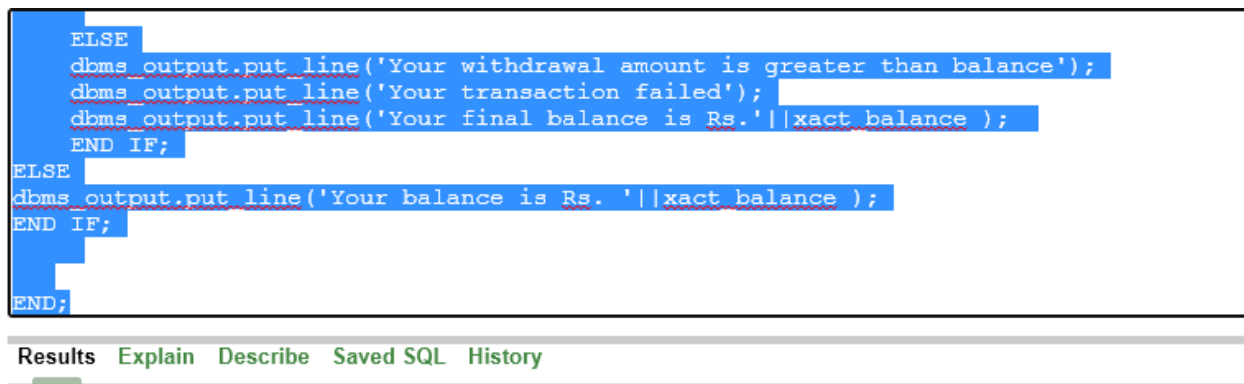
Results  Explain  Describe  Saved SQL  History

SQL Statement Running

---

**Enter Bind Variables - Google Chrome**

ⓘ 127.0.0.1:8080/apex/f?p=4500:138:2048065077455548:::

Submit

:ENTER_ACCOUNT_NUMBER 19DCS007
:1DEPOSIT_2WITHDRAWAL_3BALANCE 2
:ENTER_DEPOSIT_AMOUNT 0
:ENTER_WITHDRAWAL_AMOUNT 3566

---

Home > SQL > SQL Commands

☑ Autocommit  Display 10 ▼

```
    ELSE
    dbms_output.put_line('Your withdrawal amount is greater than balance');
    dbms_output.put_line('Your transaction failed');
    dbms_output.put_line('Your final balance is Rs.'||xact_balance );
    END IF;
ELSE
dbms_output.put_line('Your balance is Rs. '||xact_balance );
END IF;

END;
```
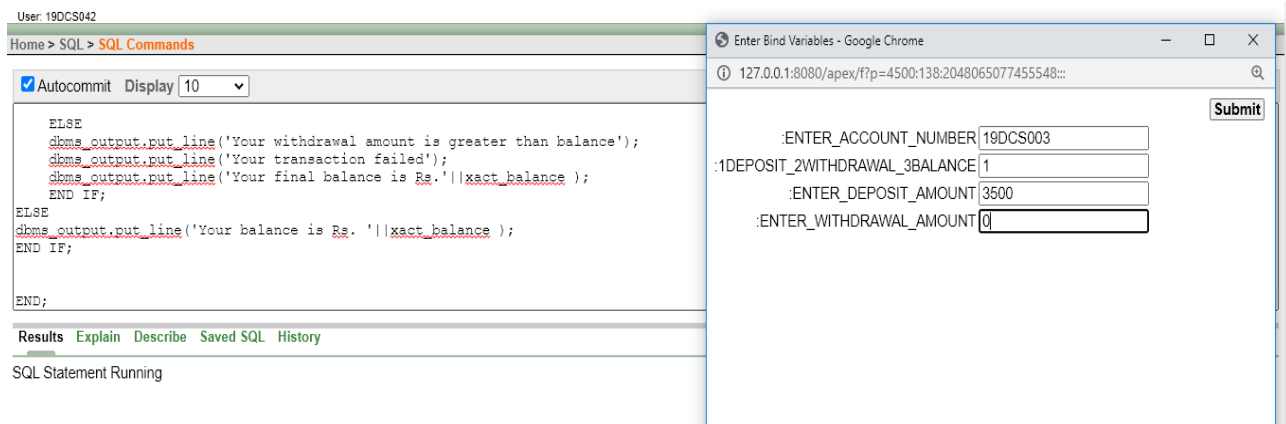
Results  Explain  Describe  Saved SQL  History

Rs. 3566 has been debited in your account
Your final balance is Rs.8504

1 row(s) updated.

0.00 seconds

# If you do not enter deposit amount or withdrawal amount then it will show your balance according to your account number

User: 19DCS042

Home > SQL > SQL Commands

☑ Autocommit  Display 10

```
    ELSE
    dbms_output.put_line('Your withdrawal amount is greater than balance');
    dbms_output.put_line('Your transaction failed');
    dbms_output.put_line('Your final balance is Rs.'||xact_balance );
    END IF;
ELSE
dbms_output.put_line('Your balance is Rs. '||xact_balance );
END IF;


END;
```

**Results** Explain Describe Saved SQL History

SQL Statement Running

---

Enter Bind Variables - Google Chrome

ⓘ 127.0.0.1:8080/apex/f?p=4500:138:2048065077455548:::

Submit

| :ENTER_ACCOUNT_NUMBER | 19DCS010 |
| :1DEPOSIT_2WITHDRAWAL_3BALANCE | 3 |
| :ENTER_DEPOSIT_AMOUNT | |
| :ENTER_WITHDRAWAL_AMOUNT | |

---

Home > SQL > SQL Commands

☑ Autocommit  Display 10

```
    ELSE
    dbms_output.put_line('Your withdrawal amount is greater than balance');
    dbms_output.put_line('Your transaction failed');
    dbms_output.put_line('Your final balance is Rs.'||xact_balance );
    END IF;
ELSE
dbms_output.put_line('Your balance is Rs. '||xact_balance );
END IF;


END;
```

**Results** Explain Describe Saved SQL History

Your balance is Rs. 35600

1 row(s) updated.

0.00 seconds

## Limitation Of Our Project

**It will ask for both Deposit and withdrawal amount at the same time but first we have asked for the number to choose - 1 for Deposit, 2 for Withdrawal and 3 for Checking the balance hence it will overcome it.**

## Conclusion

**From this project we have learned about how to use PL/SQL and all its concepts.**