

---

# Database

# Database

---



**DATA STORAGE**

# Database

---

**Table 1**

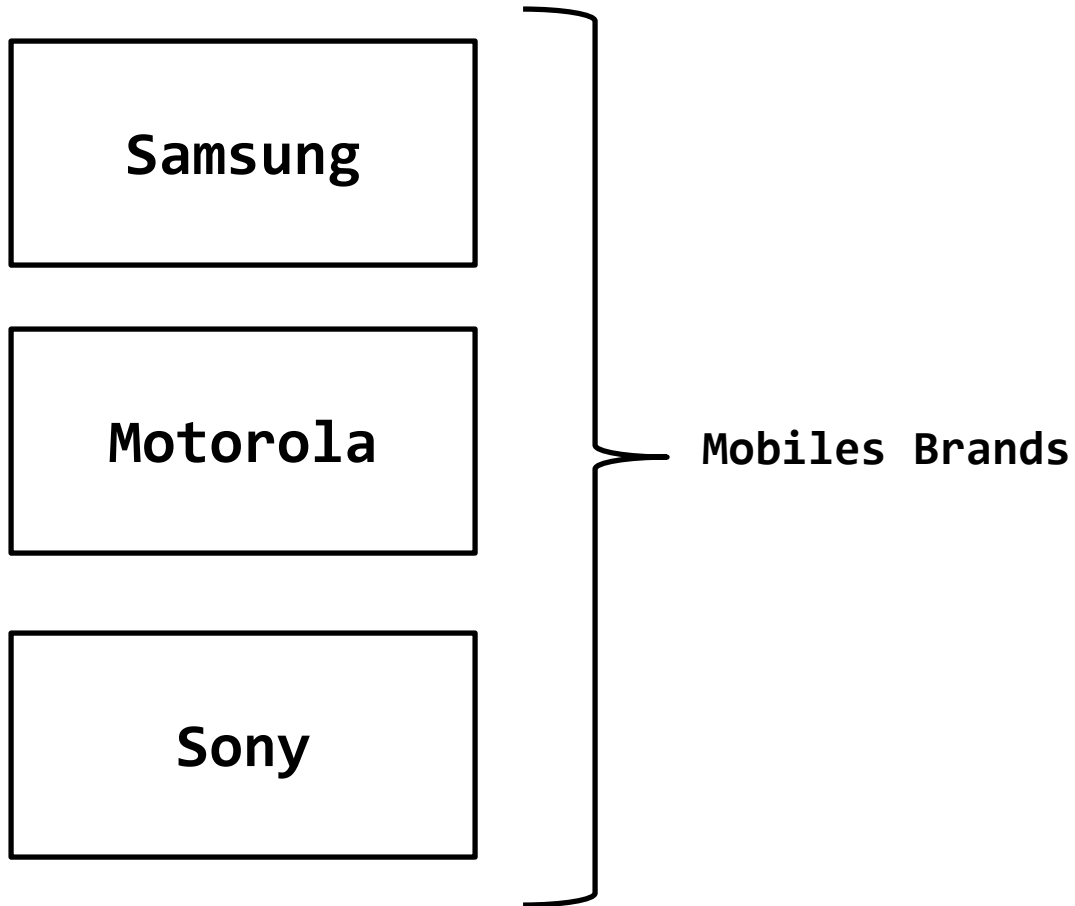
No	Name	City
1	Hari	cbe
2	Siva	chennai
3	Guna	saalem
4	John	cbe
5	Suresh	trichy

**Table 2**

No	City	State
1	Chennai	TN
2	Banglore	KN
3	Cbe	TN
4	Salem	TN
5	Trichy	TN

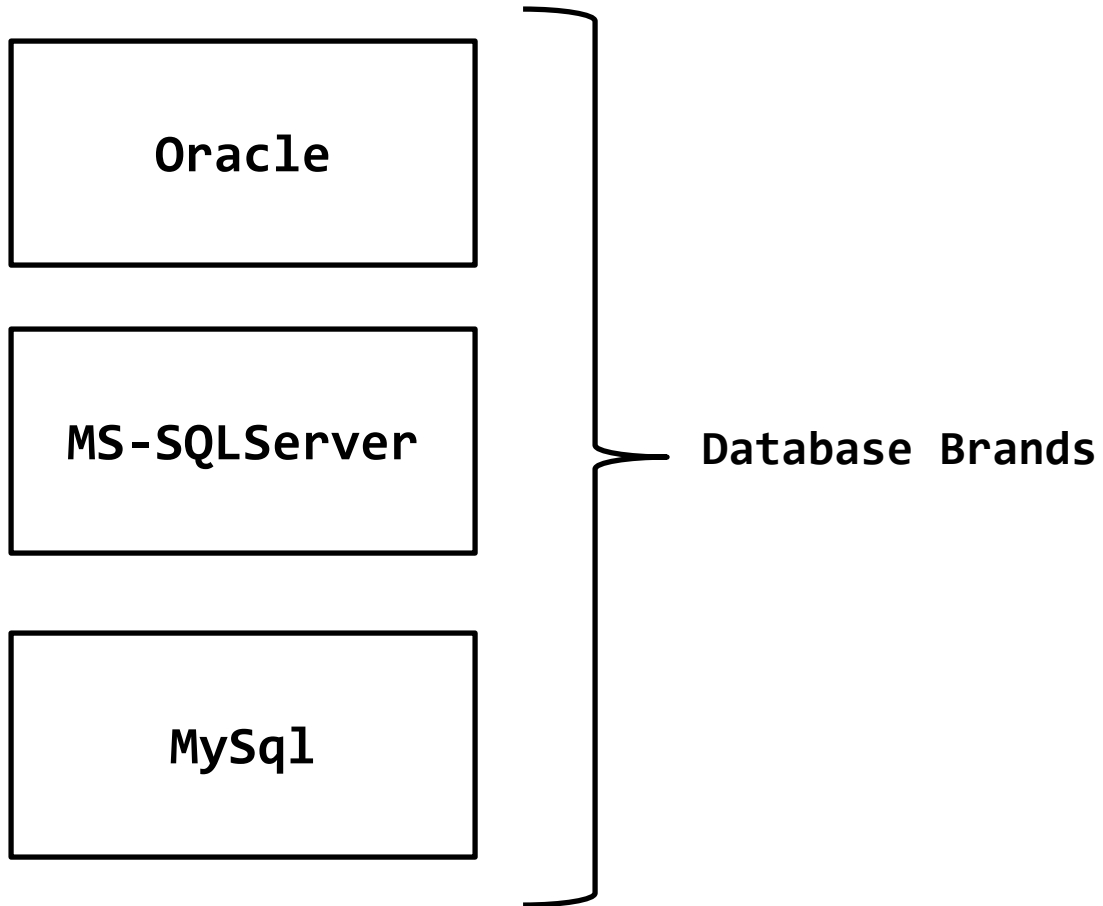
# Mobile Brands

---



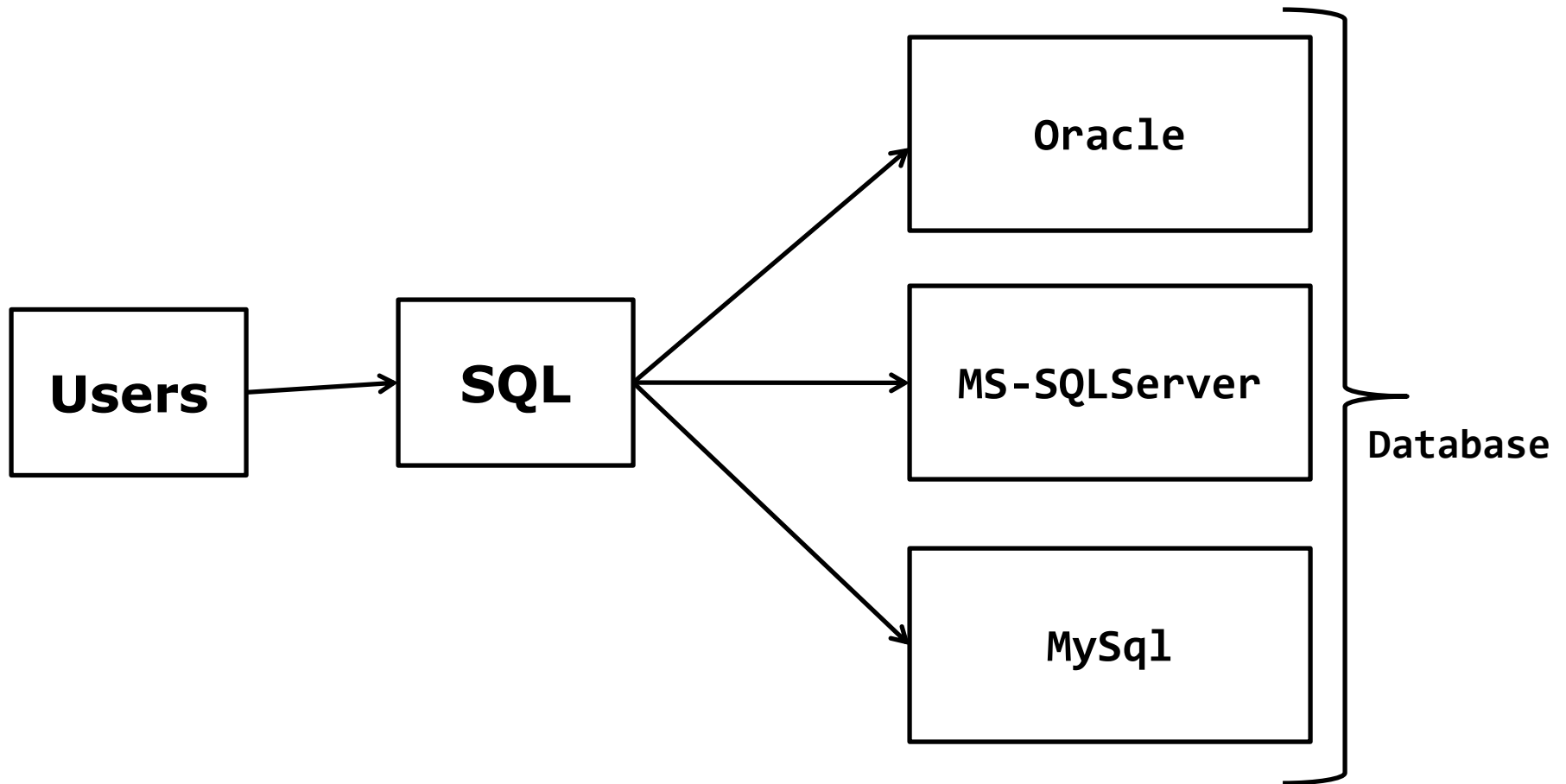
# Database

---



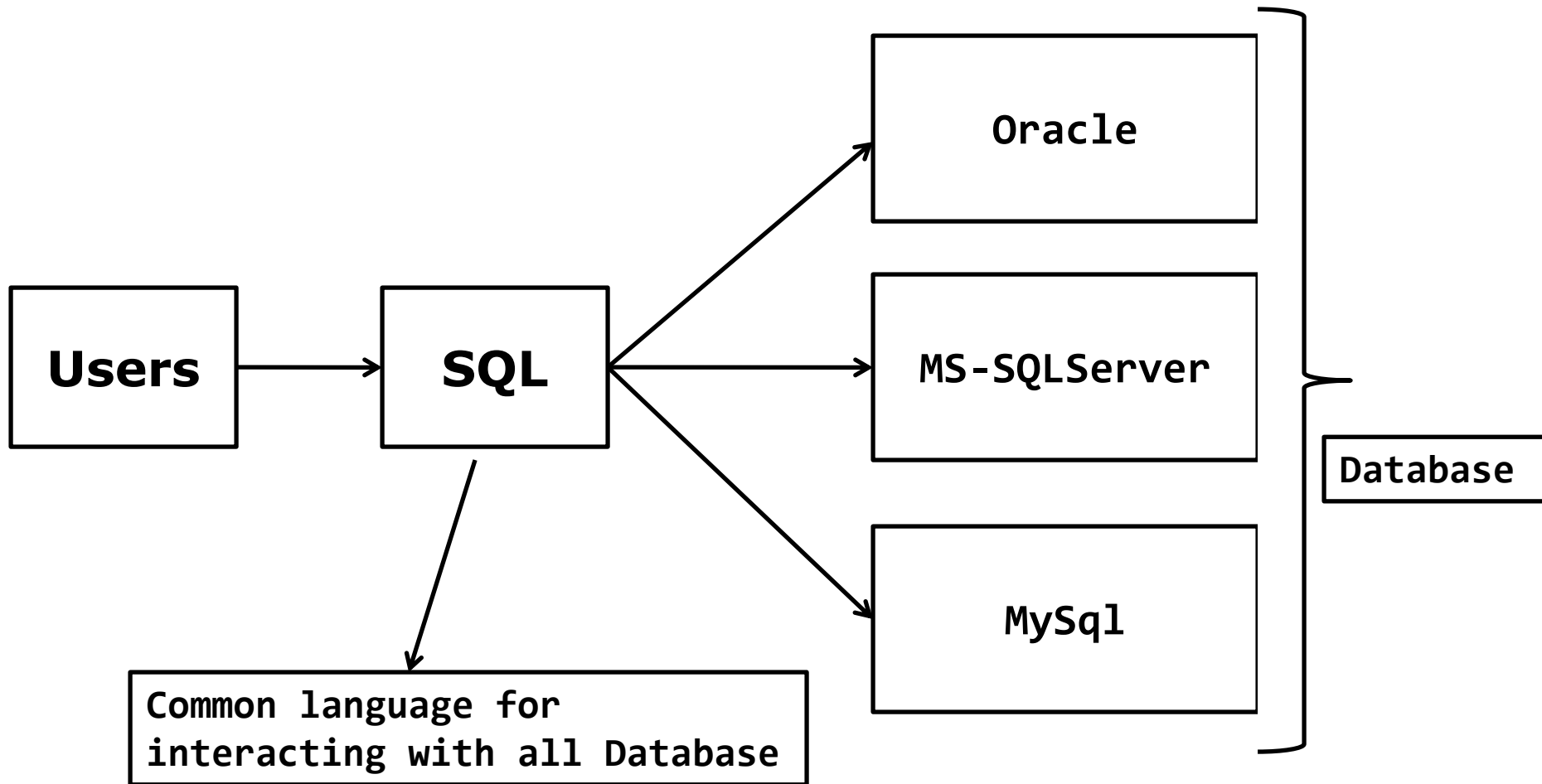
# Database

---



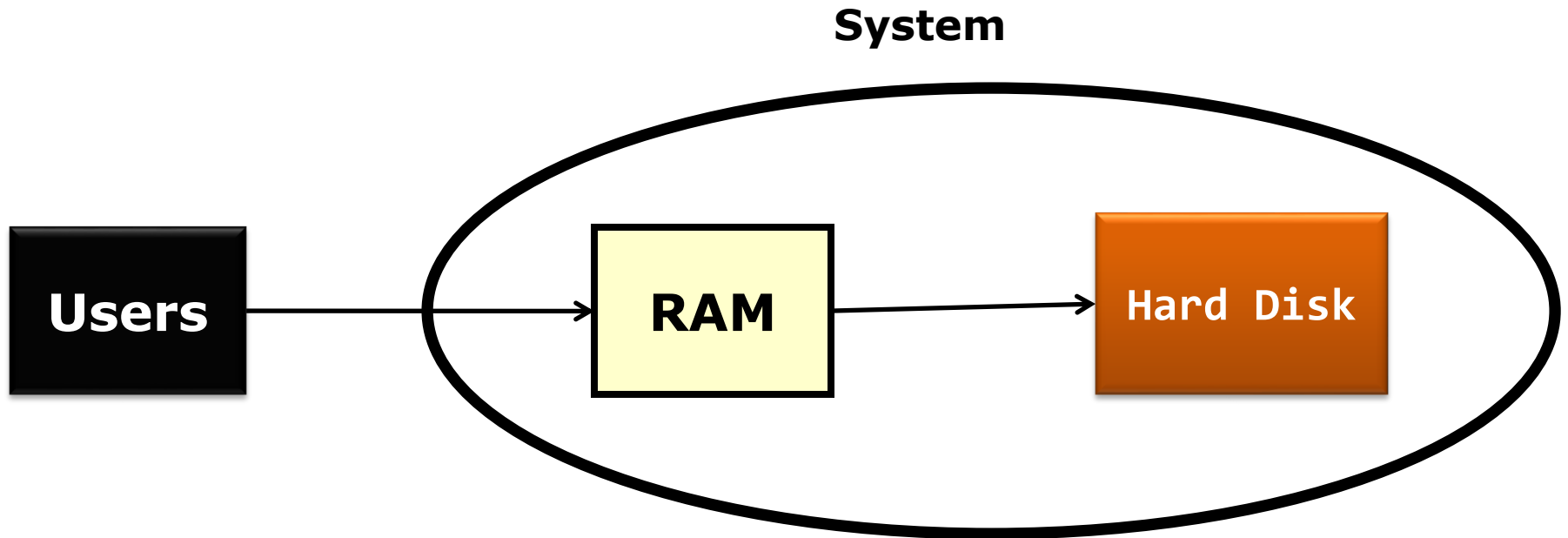
# Database

---



# Database

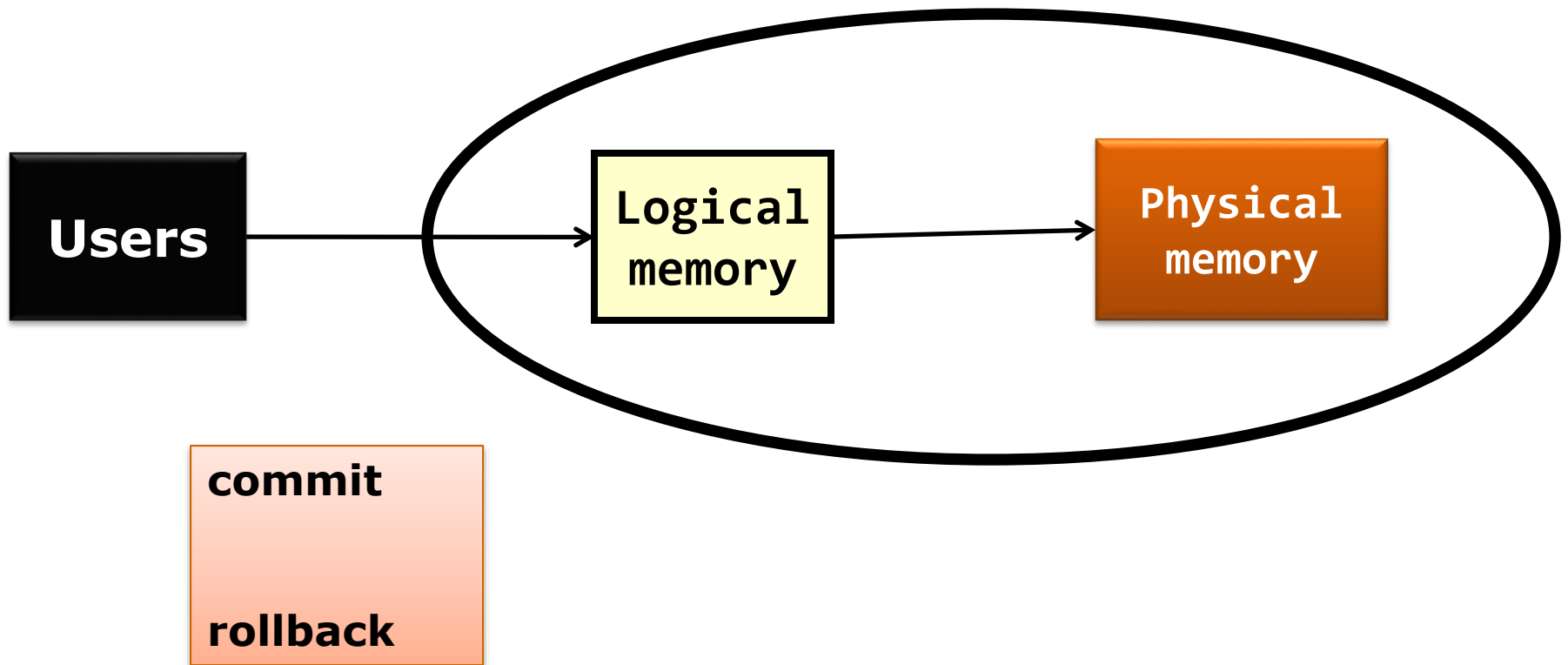
---





---

# Database



# SQL Statements

---

- **Data Definition Language (DDL) Statements**
- **Data Manipulation Language (DML) Statements**
- **Data Retrieval Language (DRL) Statements**
- **Transaction Control Statements**

# SQL Statements

---

- DDL (create, alter, drop)
- DML (insert, update, delete)
- DRL (select)
- Transaction Control Statements (commit, rollback)

# Admin Login

---

**conn**  
**/ as sysdba**

# DDL

---

**create user sns identified by php;**

---

**grant connect, resource to sns;**

# DDL

---

**drop user sns cascade;**

# DDL Commands

---

create user skcet identified by java;

grant connect,resource to skcet;

conn skcet/java



# DDL

---

```
create table student(name varchar2(15),city varchar2(15));
```

```
desc student;
```

# DDL

---

```
alter table student  
    add(state varchar2(15));
```

```
alter table student  
    modify(state varchar2(20));
```

# DDL

---

**alter table student  
rename column name to sname;**

**alter table student  
rename column id to sid;**

# DDL

---

**alter table student  
drop column state;**

**rename student to students;**

**drop table students;**

# DDL

---

```
create table employees  
  (id number,name varchar2(15),city varchar2(15));
```

# DML

---

**insert into employees values(1,'John','cbe');**

**insert into employees (id,name,city) values (1,'John','cbe');**

# DML

---

**insert into employees (id,name,city) values (1,'John','cbe');**

**insert into employees (id,name) values (1,'John');**

**insert into employees (id,name) values (&id,'&name');**

# DML

---

**update employees set city='bangalore' where eid=2;**

**update employees set city='&city' where eid=&eid;**

**delete from employees where eid=6;**

**delete from employees;**



# Table

---

No	Name
1	Ram
2	Hari
3	Sam
4	Ram
5	Guna

# SQL Query

---

1. `insert into employee values('Anil','nagpur');`
2. `select * from employee;`
3. `update employee set city='cbe' where ename='Anil';`
4. `insert into employee values('Shankar','Bombay');`
5. `insert into employee values('Jaya','Madras');`

# SQL Quires inside methods

---

```
void test()
{
    insert into employee values('Anil','nagpur');

    select * from employee;

    update employee set city='cbe' where ename='Anil';

    insert into employee values('Shankar','Bombay');

    insert into employee values('Jaya','Madras');

}
```

# PL/SQL

---

- Procedures
- Cursors
- Triggers

# Procedures (methods)

---

```
void test()  
{  
-----  
int test()  
{  
-----  
{  
}
```

Method without Return type

```
}
```

Method with Return type

```
{  
-----  
{  
}
```

Method without name  
(anonymous method)

```
{  
}
```

# Procedures

---

- Anonymous Procedures
- Stored Procedures
- Functions

# Procedures

□ Anonymous Procedures

□ Stored Procedures

□ Functions

```
{
```

```
}
```

```
-----  
void test()
```

```
{
```

```
}
```

```
-----  
int test()
```

```
{
```

```
}
```

# Java

---

```
Sample o1=new Sample();
```

```
    new Sample();
```



# Anonymous Procedures

---

- Methods without name.
- Single Usage

# Procedures

---

declare

begin

end;

/

# Procedures

---

declare



Declaration Block

begin



Executable Block



Exception Handling Block

end;

/

# Anonymous Procedure

---

```
begin
```

```
    dbms_output.put_line(' Welcome ');
```

```
end;
```

```
/
```

# Stored Procedure

---

```
create or replace procedure test
as
    begin

        dbms_output.put_line(' Welcome ');

    end;
/
```

# Functions

---

create or replace **function** test

return varchar2

is

begin

return "Welcome To Functions";

end;

/

# Procedures

---

**declare**

**a    number;**

**begin**

**a:=100;**

**dbms\_output.put\_line(' A    : '||a);**

**end;**

**/**

# Procedures

---

```
declare
  a  number;

begin

  a:=100;
  dbms_output.put_line(' A   : '||a);

  exception
    when value_error then
      dbms_output.put_line(' Only Numbers ');
end;

/
```



# Table (emp1)

---

number(3)

varchar2(15)

No	Name
1	Ram
2	Hari
3	Sam
4	Ram
5	Guna

# Table (emp1)

---

number(3) → 0 to 999

number(3) → 0 to 999

---

**declare**

**a number(2);**

**begin**

**end;**

**/**

number(3) → 0 to 999

---

declare

a emp1.no%type;  
b emp1.name%type;

begin

end;

/

# Table (emp1)

---

number(3)

varchar2(15)

No	Name
1	Ram
2	Hari
3	Sam
4	Ram
5	Guna

No	Name
1	Ram
2	Hari
3	Sam
4	Ram
5	Guna

declare

a emp1%rowtype;

b emp1.name%type;

begin

end;

# Procedure with cursors

---

```
declare
```

```
emp emp1.ename%type;
```

```
cursor s1 is
```

```
    select ename from emp1;
```

```
begin
```

```
    open s1;
```

```
    loop
```

```
        fetch s1 into name;
```

```
        exit when s1%notfound;
```

```
        dbms_output.put_line(' Emp Name '||name);
```

```
    end loop;
```

```
    close s1;
```

```
end;
```

```
/
```

# Procedure with cursors

---

```
declare
```

```
emp emp1%rowtype;
```

```
cursor s1 is
```

```
    select * from emp1;
```

```
begin
```

```
    for emp in s1 loop
```

```
        dbms_output.put_line(emp.ename||'      '||emp.city);
```

```
    end loop;
```

```
end;
```

```
/
```



# Stored Procedures

---

```
create or replace procedure test  
is
```

```
    emp emp1%rowtype;
```

```
    cursor s1 is  
        select * from emp1;
```

```
begin  
    for emp in s1 loop
```

```
        dbms_output.put_line(emp.ename||'      '||emp.city);
```

```
    end loop;
```

```
end;  
/
```