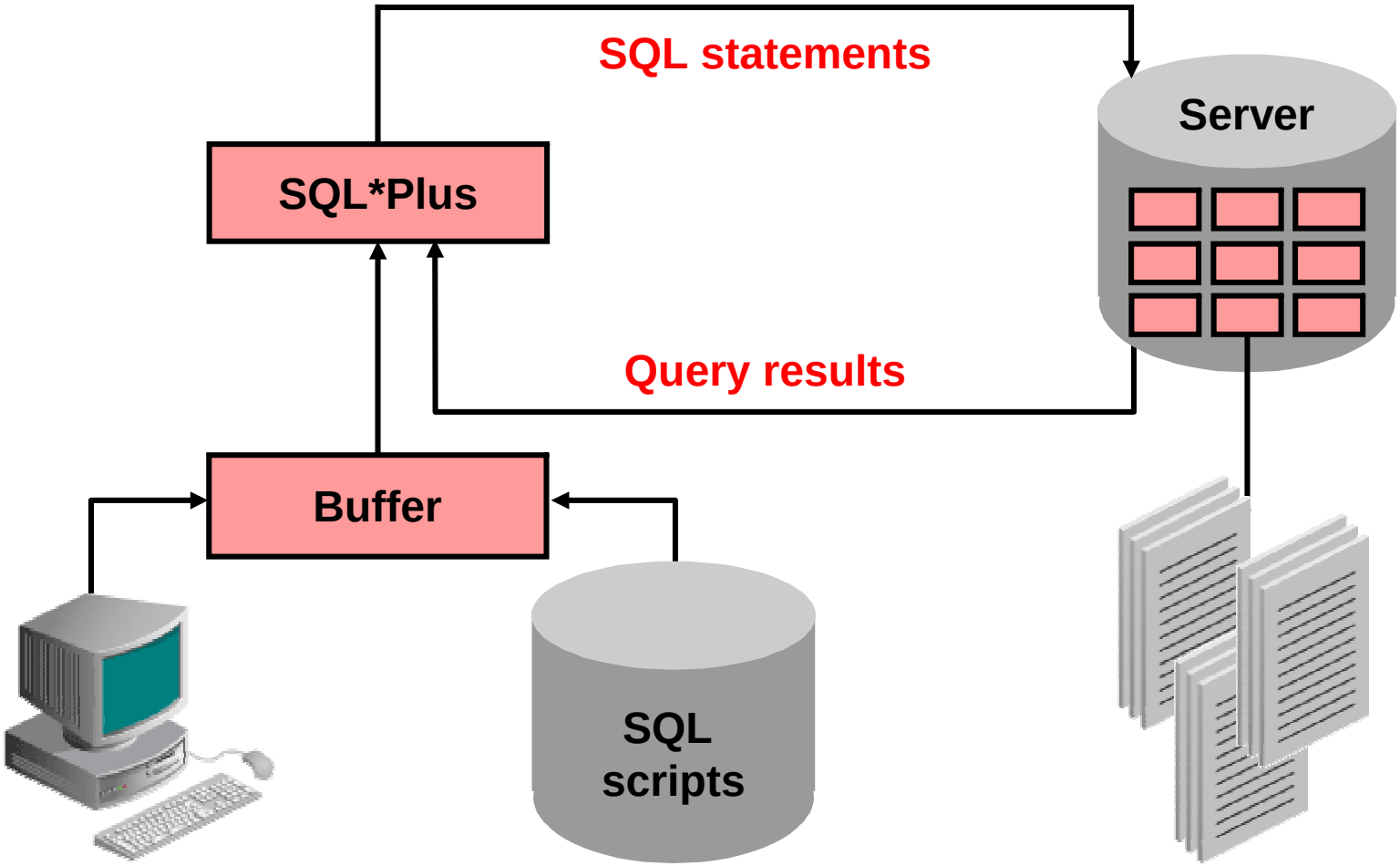
Using SQL*Plus

Objectives

After completing this appendix, you should be able to do the following:

- **Log in to SQL*Plus**
- **Edit SQL commands**
- **Format output using SQL*Plus commands**
- **Interact with script files**

SQL and SQL*Plus Interaction



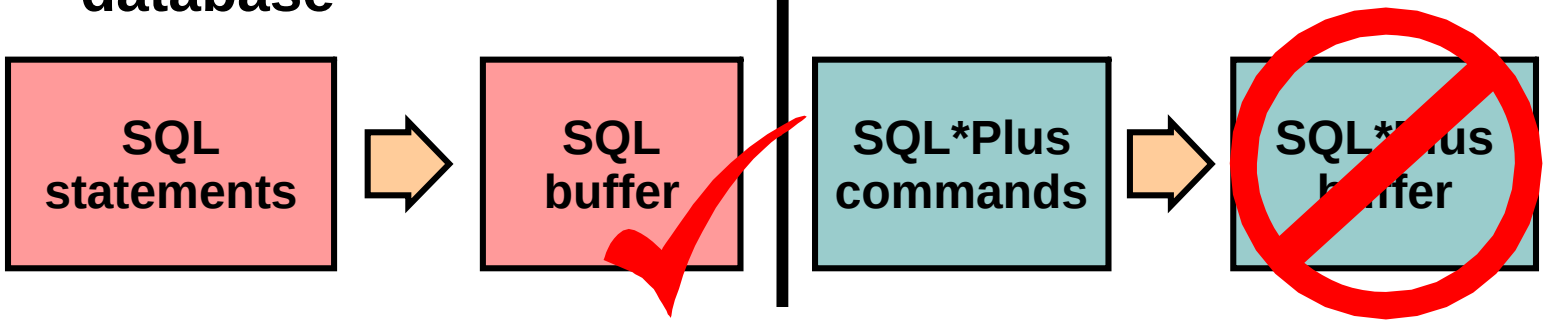
SQL Statements Versus SQL*Plus Commands

SQL

- A language
- ANSI-standard
- Keywords cannot be abbreviated
- Statements manipulate data and table definitions in the database

SQL*Plus

- An environment
- Oracle-proprietary
- Keywords can be abbreviated
- Commands do not allow manipulation of values in the database



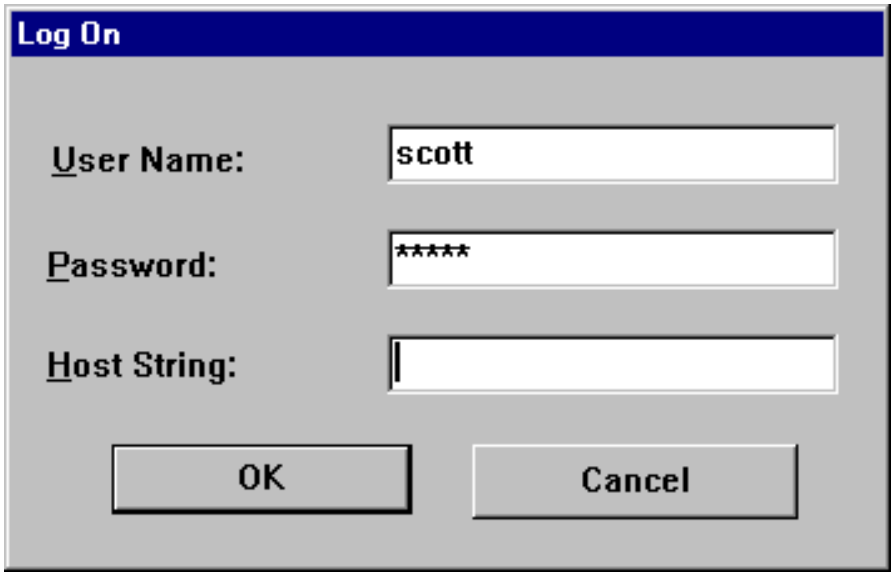
Overview of SQL*Plus

- Log in to SQL*Plus.
- Describe the table structure.
- Edit your SQL statement.
- Execute SQL from SQL*Plus.
- Save SQL statements to files and append SQL statements to files.
- Execute saved files.
- Load commands from file to buffer to edit.

ORACLE

Logging In to SQL*Plus

- **From a Windows environment:**



- **From a command line:**

```
sqlplus [username[/password
                  [@database]]]
```

Displaying Table Structure

Use the SQL*Plus `DESCRIBE` command to display the structure of a table:

```
DESC[RIBE] tablename
```

Displaying Table Structure

```
SQL> DESCRIBE departments
```

```
Name                          Null?    Type
----------------------------- -------- ------------
DEPARTMENT_ID                 NOT NULL NUMBER(4)
DEPARTMENT_NAME               NOT NULL VARCHAR2(30)
MANAGER_ID                             NUMBER(6)
LOCATION_ID                            NUMBER(4)
```

SQL*Plus Editing Commands

- **A[PPEND]** *text*
- **C[HANGE]** */ old / new*
- **C[HANGE]** */ text /*
- **CL[EAR] BUFF[ER]**
- **DEL**
- **DEL** *n*
- **DEL** *m n*

SQL*Plus Editing Commands

- I[NPUT]
- I[NPUT] *text*
- L[IST]
- L[IST] *n*
- L[IST] *m n*
- R[UN]
- *n*
- *n text*
- 0 *text*

Using LIST, n, and APPEND

```
SQL> LIST
```

```
1  SELECT last_name
2* FROM   employees
```

```
SQL> 1
```

```
1* SELECT last_name
```

```
SQL> A , job_id
```

```
1* SELECT last_name, job_id
```

```
SQL> L
```

```
1  SELECT last_name, job_id
2* FROM   employees
```

Using the CHANGE Command

```
SQL> L
1* SELECT * from employees
SQL> c/employees/departments
1* SELECT * from departments
SQL> L
1* SELECT * from departments
```

SQL*Plus File Commands

- **SAVE *filename***
- **GET *filename***
- **START *filename***
- **@ *filename***
- **EDIT *filename***
- **SPOOL *filename***
- **EXIT**

Using the SAVE and START Commands

```
SQL> L
  1  SELECT last_name, manager_id, department_id
  2* FROM   employees
SQL> SAVE my_query
```

```
Created file my_query
```

```
SQL> START my_query
```

```
LAST_NAME                 MANAGER_ID DEPARTMENT_ID
------------------------- ---------- -------------
King                                          90
Kochhar                          100          90
...
20 rows selected.
```

Summary

In this appendix, you should have learned how to use SQL*Plus as an environment to do the following:

- **Execute SQL statements**
- **Edit SQL statements**
- **Format output**
- **Interact with script files**