

AKASH SOFT SOLUTIONS

Welcome To [AKASH SOFT SOLUTIONS](#) YouTube Channel.

E-Book Study Material of Database Management

Purpose of this channel

The purpose of this channel is to help and make successful students learning database management.

(इस चैनल का उद्देश्य यह है कि डेटाबेस मैनेजमेंट सिखने वाले छात्रों को सहायता देना और उन्हें सफल बनाना है |)

(For more information or for any kind of question-answer, follow us on Instagram and DM us.)

(ज्यादा जानकारी के लिए या किसी भी प्रकार के सवाल – जवाब के लिए हमें इन्स्टाग्राम पे फॉलो करके डीएम करें |)

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TCL & DCL COMMANDS

TRANSACTION CONTROL LANGUAGE :(TCL)

Transaction Control Language (TCL) commands are used to manage transactions in database. These are used to manage the changes made by DML statements. It also allows statements to be grouped together into logical transactions.

COMMIT:

It allows a user to record the changes permanently into the database. Prior to the execution of a COMMIT command, all changes made to the rows of a table are stored in a database buffer or main memory. If the user quits the database before committing the changes, no data will be written to the database files and the changes will be lost.

SYNTAX:

commit;

Example:

commit;

ROLLBACK:

It restores the database to last committed state. The changes made to a table have not been committed; the user can cancel all the intermediate changes made to a table by issuing a ROLLBACK statement.

SYNTAX:

rollback;

rollback to savepointname;

Example: rollback; rollback to A;

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SAVEPOINT:

It allows the user to undo only a part of the current transaction by allowing the user to go back to a particular point in time.

SYNTAX:

savepoint savepointname;

Example:

savepoint A;

DATA CONTROL LANGUAGE (DCL):

DCL is used to create roles, permissions, and referential integrity as well it is used to control access to database by securing it.

GRANT:

Gives user's access privileges to database.

SYNTAX:

GRANT (object privilege) on tablename to username;

EXAMPLE:

grant insert on account to A;

REVOKE :Withdraws user's access privileges to database given with the GRANT command.

SYNTAX:

REVOKE (object privilege) on tablename from username;

EXAMPLE:

revoke select on accountdetails from A;

COMMENT:

It is used to create a comments about the table in the data dictionary.

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SYNTAX:

comment on table tablename is 'comment line'

EXAMPLE:

comment on table accountdetails is 'accountbanking';

Transaction Control Language: Table Creation:

SQL> create table pen(name char(10),id number(15));

Output:

Table created.

Query:

SQL> insert into pen values('fathima',10);

Output:

1 row created.

Query:

SQL> insert into pen values('noor',11);

Output:

1 row created.

Query:

SQL> rollback;

Output:

Rollback complete.

Query:

SQL> insert into pen values('shahtaj',13);

Output:

1 row created.

Query:

SQL> insert into pen values('sultana',14);

Output:

1 row created. **Query:** SQL> savepoint s1; **Output:**

Savepoint created.

Query:

SQL> insert into pen values('manhar',15);

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Output:

1 row created.

Query:

SQL> insert into pen values('parveen',16);

Output:

1 row created. **Query:** SQL> savepoint s2; **Output:**

Savepoint created.

Query:

SQL> insert into pen values('ghosu',17);

Output:

1 row created.

Query:

SQL> select * from pen;

Output:

NAME ID

shahtaj 13
sultana 14
manhar 15
parveen 16
ghosu 17

Query:

SQL> insert into pen values('reshu',18);

Output:

1 row created.

Query:

SQL> select * from pen;

Output:

NAME ID

shahtaj 13
sultana 14
manhar 15
parveen 16

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ghosu 17

reshu 18

6 rows selected.

Query: SQL>savepoint s3;

Output:

Savepoint created.

Query:

SQL> select * from pen;

Output:

NAME ID

shahtaj 13

sultana 14

manhar 15

parveen 16

ghosu 17

reshu 18

6 rows selected.

Query:

SQL> rollback to s2;

Output:

Rollback complete.

Query:

SQL> select * from pen;

Output:

NAME ID

shahtaj 13

sultana 14

manhar 15

parveen 16

Query:

SQL> rollback to s1;

Output:

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Rollback complete.

Query:

SQL> select * from pen;

Output:

NAME ID

shahtaj 13

sultana 14

Query:

SQL> create table beauty(name char(13),id number(14));

Output:

Table created.

Query: SQL> savepoint s1;

Output:

Savepoint created.

Query:

SQL> insert into beauty values('shetu',10);

Output:

1 row created.

Query:

SQL> insert into beauty values('mahe',20);

Output:

1 row created. **Query:** SQL> savepoint s2; **Output:**

Savepoint created.

Query:

SQL> delete from beauty where id=10;

Output:

1 row deleted.

Query:

SQL> select * from beauty;

Output:

NAME ID

mahe 20

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Query:

SQL> delete from beauty where id=20;

Output:

1 row deleted.

Query:

SQL> select * from beauty;

Output:

no rows selected

Query:

SQL> rollback to s2;

Output:

Rollback complete.

Query:

SQL> commit;

Output:

Commit complete.

Query:

SQL> rollback to s1;

Output:

rollback to s1

*

ERROR at line 1:

ORA-01086: savepoint 'S1' never established

ASSIGNING COMMENTS FOR TABLE

SQL> comment on table employee1 is 'EMPLOYEE DETAILS'; Comment created.

SQL> select comments from user_tab_comments;

COMMENTS

EMPLOYEE DETAILS

ASSIGNING COMMENTS FOR COLUMN

SQL> comment on column employee1.EMPLOYEE_NO is 'EMPLOYEE REGISTRATION NUMBER';

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Comment created.

SQL> select comments from USER_COL_COMMENTS;
COMMENTS

EMPLOYEE REGISTRATION NUMBER

3 rows selected.

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