DDL COMMANDS

CREATING TABLE AUTHOR:

SQL>create table author(author_id varchar(10), names varchar(20),email varchar(50),phone number number(20),status varchar(20),primary key(author id));

2 COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID COMMENTS
¹ AUTHOR ID	VARCHAR2(10 BYTE)	No	(null)	1 (null)
² NAMES	VARCHAR2(20 BYTE)	Yes	(null)	2 (null)
3 EMAIL	VARCHAR2(50 BYTE)	Yes	(null)	3 (null)
⁴ PHONE NUMBER	NUMBER(20,0)	Yes	(null)	4 (null)
5 STATUS	VARCHAR2(20 BYTE)	Yes	(null)	5 (null)

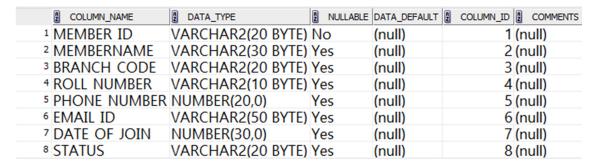
CREATING TABLE PUBLISHER:

SQL>create table publisher(publisher_id varchar(10), pubname varchar(20), address varchar(50), primary key(publisher_id));

2 COLUMN_NAME	2 DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID 2 COMMENTS
¹ PUBLISHER IE	VARCHAR2(10 BYTE)	No	(null)	1 (null)
² PUBNAME	VARCHAR2(20 BYTE)	Yes	(null)	2 (null)
3 ADDRESS	VARCHAR2(50 BYTE)	Yes	(null)	3 (null)

CREATING TABLE MEMBER:

SQL>create table members(member_id varchar(20),membername varchar(30),branch_code varchar(20),roll_number varchar(10),phone_number number(20),email_id varchar(50),date_of_join number(30),status varchar(20),primary key(member_id));



CREATING TABLE LANGUAGE:

SQL>create table languages(language_id varchar(20),langname varchar(20));

COLUMN_NAME	DATA_TYPE	NULLABLE DATA_DEFAULT	COLUMN_ID 2 COMMENTS
1 LANGUAGE ID	VARCHAR2(20 BYTE)	No (null)	1 (null)
² LANGNAME	VARCHAR2(20 BYTE)	Yes (null)	2 (null)

CREATING TABLE BOOK:

SQL>create table book(book_id varchar(20),title varchar(20),language_id varchar(20),MRP number(10),publisher_id varchar(10),published_date varchar(10),volume varchar(20),status varchar(10),primary key(book_id),foreign key(language_id) references languages(language_id),foreign key(publisher_id) references publisher(publisher_id));

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID COMMENTS
¹ BOOK ID	VARCHAR2(20 BYTE)	No	(null)	1 (null)
² TITLE	VARCHAR2(20 BYTE)	Yes	(null)	2 (null)
3 LANGUAGE ID	VARCHAR2(20 BYTE)	Yes	(null)	3 (null)
⁴ MRP	NUMBER(10,0)	Yes	(null)	4 (null)
5 PUBLISHER ID	VARCHAR2(10 BYTE)	Yes	(null)	5 (null)
6 PUBLISHED DATE	VARCHAR2(10 BYTE)	Yes	(null)	6 (null)
7 VOLUME	VARCHAR2(20 BYTE)	Yes	(null)	7 (null)
8 STATUS	VARCHAR2(10 BYTE)	Yes	(null)	8 (null)

CREATING TABLE BOOK AUTHOR:

SQL>create table book_author(book_id varchar(20),author_id varchar(10),foreign key(book_id) references book(book_id),foreign key(author_id) references author(author_id));

2 COLUMN_NAME	DATA_TYPE	NULLABLE DATA_DEFAULT	COLUMN_ID COMMENTS
¹ BOOK ID	VARCHAR2(20 BYTE)	No (null)	1 (null)
² AUTHOR ID	VARCHAR2(10 BYTE)	No (null)	2 (null)

CREATING TABLE BOOK ISSUE:

SQL>create table book_issue(issue_id varchar(20),date_of_issue varchar(10),book_id varchar(20),member_id varchar(20),expected_date_of_return varchar(20),status varchar(20),primary key(issue_id),foreign key(book_id) references book(book_id),foreign key(member_id) references members(member_id));

2 COLUMN_NAME	DATA_TYPE	2 NULLABLE	DATA_DEFAULT	COLUMN_ID COMMENTS
¹ ISSUE ID	VARCHAR2(20 BYTE)	No	(null)	1 (null)
² DATE OF ISSUE	VARCHAR2(10 BYTE)	Yes	(null)	2 (null)
3 BOOK ID	VARCHAR2(20 BYTE)	Yes	(null)	3 (null)
4 MEMBER ID	VARCHAR2(20 BYTE)	Yes	(null)	4 (null)
5 EXPECTED DATE OF RETURN	VARCHAR2(20 BYTE)	Yes	(null)	5 (null)
6 STATUS	VARCHAR2(20 BYTE)	Yes	(null)	6 (null)

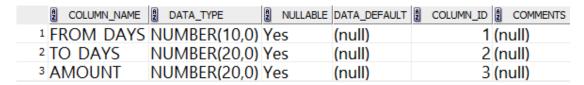
CREATING TABLE BOOK_RETURN:

SQL>create table book_return(issue_id varchar(20),actual_date_of_return varchar(20),late_days varchar(10),late_fee varchar(10),primary key(issue_id),foreign key(issue_id) references book_issue(issue_id));

2 COLUMN_NAME	2 DATA_TYPE	NULLABLE DATA_DEFAULT	COLUMN_ID COMMENTS
¹ ISSUE ID	VARCHAR2(20 BYTE)	No (null)	1 (null)
² ACTUAL DATE OF RETURN	VARCHAR2(20 BYTE)	Yes (null)	2 (null)
3 LATE DAYS	VARCHAR2(10 BYTE)	Yes (null)	3 (null)
4 LATE FEE	VARCHAR2(10 BYTE)	Yes (null)	4 (null)

CREATING TABLE LATE FEE RULE:

SQL>create table late_fee_rule(from_days number(10),to_days number(20),amount number(20));



INSERTING VALUES INTO TABLE AUTHOR:

SQL>insert into author values('a1','chetan bhagat','cb@gmail.com',9080706050,'available');

SQL>insert into author values('a2','Jane Austin','ja@gmail.com',9181716151,'available');

SQL>select * from author;

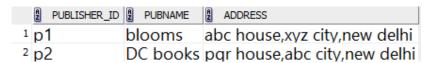


INSERTING VALUES INTO TABLE PUBLISHER:

SQL>insert into publisher values('p1','blooms','abc house,xyz city,new delhi');

SQL>insert into publisher values('p2','DC books','pqr house,abc city,new delhi');

SQL>select * from publisher;



INSERTING VALUES INTO TABLE MEMBERS:

SQL>insert into members values

('m1','john','branch1',001,5060708090,'john@gmail.com','1/1/01','available');

SQL>insert into members values

('m2','mary','branch2',002,5161718191,'mary@gmail.com','20/2/2002','available');

SQL>select * from members;

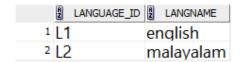
MEMBER_ID	MEMBERNAME	BRANCH_CODE	ROLL_NUMBER	PHONE_NUMBER	EMAIL_ID	DATE_OF_JOIN	2 STATUS
¹ m1	john	branch1	1	5060708090	john@gmail.com	01-01-01	available
² m2	mary	branch2	2	5161718191	mary@gmail.com	20-02-02	available

INSERTING VALUES INTO TABLE LANGUAGE:

SQL>insert into languages values('L1','english');

SQL>insert into languages values('L2','malayalam');

SQL>select * from languages;



INSERTING VALUES INTO TABLE BOOK:

SQL>insert into book values('b1','2 states','L1',125,'p1','1/1/01','v1','available');

SQL>insert into book values('b2','pride','L2',500,'p2','1/1/20','v2','available');

SQL>select * from book;



INSERTING VALUES INTO TABLE BOOK_ISSUE:

SQL>insert into book_issue values('bl1','12/8/24','b1','m1','20/8/24','available');

SQL>insert into book_issue values('bl2','15/8/24','b1','m1','25/8/24','available');

SQL>select * from book issue;



INSERTING VALUES INTO TABLE BOOK_AUTHOR:

SQL>insert into book author values('b1','a1');

SQL>insert into book_author values('b2','a2');

SQL>select * from book_author;

A	BOOK_ID	AUTHOR_ID
1 b	1 a	a1
2 b2	2 a	a2

INSERTING VALUES INTO TABLE BOOK RETURN:

SQL>insert into book_return values('bl1','20/8/24',0,0);

SQL>insert into book_return values('bI2','25/8/24',5,10);

SQL>select * from book_return;

ISSUE_ID	ACTUAL_DATE_OF_RETURN	LATE_DAYS	A LATE_FEE
1 bI1	20-08-24	0	0
² bI2	25-08-24	5	10

INSERTING VALUES INTO TABLE LATE FEE RULE:

SQL>insert into late_fee_rule values(0,7,10);

SQL>insert into late_fee_rule values(7,30,100);

SQL>select * from late_fee_rule;

A	FROM_DAYS	TO_DAYS	AMOUNT
1	0	7	10
2	7	30	100

1)ALTER TABLE—adding a new column to book table

SQL>alter table book add pages varchar(20);

2 COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID COMMENTS
		_		
¹ BOOK ID	VARCHAR2(20 BYTE)	No	(null)	1 (null)
² TITLE	VARCHAR2(20 BYTE)	Yes	(null)	2 (null)
3 LANGUAGE ID	VARCHAR2(20 BYTE)	Yes	(null)	3 (null)
⁴ MRP	NUMBER(10,0)	Yes	(null)	4 (null)
5 PUBLISHER ID	VARCHAR2(10 BYTE)	Yes	(null)	5 (null)
6 PUBLISHED DATE	VARCHAR2(20 BYTE)	Yes	(null)	6 (null)
7 VOLUME	VARCHAR2(20 BYTE)	Yes	(null)	7 (null)
8 STATUS	VARCHAR2(10 BYTE)	Yes	(null)	8 (null)
9 PAGES	VARCHAR2(20 BYTE)	Yes	(null)	9 (null)

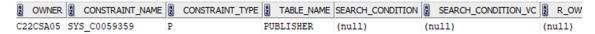
2)ALTER TABLE—modify the data type of a column in the member table

SQL>alter table members modify date_of_join date;

COLUMN_NAME	2 DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID COMMENTS
¹ MEMBER ID	VARCHAR2(20 BYTE)	No	(null)	1 (null)
² MEMBERNAME	VARCHAR2(30 BYTE)	Yes	(null)	2 (null)
3 BRANCH CODE	VARCHAR2(20 BYTE)	Yes	(null)	3 (null)
4 ROLL NUMBER	VARCHAR2(10 BYTE)	Yes	(null)	4 (null)
5 PHONE NUMBER	NUMBER(20,0)	Yes	(null)	5 (null)
6 EMAIL ID	VARCHAR2(50 BYTE)	Yes	(null)	6 (null)
7 DATE OF JOIN	DATE	Yes	(null)	7 (null)
8 STATUS	VARCHAR2(20 BYTE)	Yes	(null)	8 (null)

3)TRUNCATE TABLE—remove all records from publisher table

SQL>SELECT * FROM USER_CONSTRAINTS WHERE TABLE_NAME ='PUBLISHER';



SQL>SELECT * FROM USER_CONSTRAINTS WHERE TABLE_NAME = 'BOOK';

8 OWNER	A	CONSTRAINT_NAME	CONSTRAINT_TYPE	TABLE_NAME	SEARCH_CONDITION	SEARCH_CONDITION_VC	R_OWNER	R_CONSTRAINT_NAME	P DELE
C22CSA05	SYS	_C0059444	P	BOOK	(null)	(null)	(null)	(null)	(null)
C22CSA05	SYS	_C0059445	R	BOOK	(null)	(null)	C22CSA05	SYS_C0059415	NO ACT
C22CSA05	SYS	_C0059446	R	BOOK	(null)	(null)	C22CSA05	SYS_C0059359	NO ACT

SQL>ALTER TABLE BOOK DISABLE CONSTRAINT SYS_C0059446;

table BOOK altered.

SQL>TRUNCATE TABLE PUBLISHER;

table PUBLISHER truncated.

SQL>Select * from publisher;



4)DROP TABLE—delete the author table from the database

SQL>drop table author;

SQL>desc author;

table AUTHOR dropped.	
desc author	
error:	
ERROR: object AUTHOR does not e	x ist

5)RENAME TABLE—change the name of late_fee_rule table to fine table

SQL>alter table late_fee_rule rename to fine_table;

SQL>desc fine_table;

table LATE_FEE_RULE altered.

desc fine_table

Name Null Type

----FROM_DAYS NUMBER(10)

TO_DAYS NUMBER(20)

AMOUNT NUMBER(20)