

```
create table country (id number(2) primary key, namr varchar2(30) not null);
```

```
insert into country(id,name) values(01,'Bangladesh');
```

```
insert into country(id,name) values(02,'Bangladesh');
```

```
create table division (division_id number(2) primary key, division_name varchar2(30) not null, id number(2), constraint division_country_fk foreign key(id) references country(id));
```

```
insert into division (division_id,division_name ,id) values(11, 'Dhaka', 01);
```

```
insert into division (division_id,division_name ) values(12, 'Rangpur');
```

```
select c.name, d.division_name, d.division_id from country c ,division d;
```

```
select c.name, d.division_name, d.division_id from country c ,division d where c.id=d.id;
```

```
create table district(dis_id number(2) primary key, dis_name varchar2(20) not null, division_id number(2), constraint dis_div_fk foreign key(division_id) references division(division_id));
```

```
insert into district(dis_id, dis_name, division_id) values(22,'Tangail',11);
```

```
insert into district(dis_id, dis_name, division_id) values(23,'Gagipur',11);
```

```
insert into district(dis_id, dis_name, division_id) values(24,'Gopalgonj',12);
```

```
create table upz(upz_id number(2) primary key, upz_name varchar2(20) not null, dis_id number(2), constraint upz_dis_fk foreign key (dis_id) references district(dis_id));
```

```
insert into upz(upz_id, upz_name, dis_id) values(33, 'Gopalpur',22);
```

```
insert into upz(upz_id, upz_name, dis_id) values(34, 'Mirzapur',22);
```

```
insert into upz(upz_id, upz_name, dis_id) values(35, 'Modupure',23);
```

```
insert into upz(upz_id, upz_name, dis_id) values(36, 'Nagorpure',24);
```

```
select d.dis_name , u.upz_id, u.upz_name from district d , upz u where d.dis_id=u.upz_id;
```

```
=====index=====
```

```
create index ind_lastName on employees(last_name);
```

```
select index_name from user_indexes;
```

```
drop index employees.ind_lastName;
```

```
drop index ind_lastName;
```

=====synonyms=====

create synonym sys_name for employees;

select synonym_name from user_synonyms;

select * from sys_name;

drop synonym sys_name;

=====exam=====

1. create user eid identified by eid;

2. grant dba to eid;

a) create table department(

dep_id number(3) primary key,

department_name varchar2(20) not null);

b) create table employee(

emp_id number(3) primary key,

emp_name varchar2(20) unique,

salary number(5) check(salary>10000),

join_date date default sysdate,

country varchar2(20) default 'BD',

dep_id number(3) ,constraint emp_dep_fk foreign key (dep_id) references department(dep_id));

c)

describe department;

describe employee;

3.

a) create sequence dep_seq start with 10 increment by 10;

b) create sequence emp_seq start with 5 increment by 5;

c) select sequence_name from user_sequences;

4. department table:

a) select index_name from user_indexes;

b) create index dep_name_ind on department(department_name);

c) select index_name from user_indexes;

d) insert into department(dep_id, department_name) values(dep_seq.nextval, 'ADMIN');

insert into department(dep_id, department_name) values(dep_seq.nextval, 'SOFTWARE');

insert into department(dep_id, department_name) values(dep_seq.nextval, 'MARKETING');

e) create view dep_view as select dep_id, department_name from department;

f) select view_name from user_views;

g) create synonym dep_syn for department;

h)

5. Employee table:

a) select index_name from user_indexes;

b) create index sala_name_ind on employee(salary);

c) select sequence_name from user_sequences;

d) insert into employee(emp_id,emp_name,salary,dep_id) values(emp_seq.nextval,'Mostafiz', 70000, 10);

insert into employee(emp_id,emp_name,salary,dep_id) values(emp_seq.nextval,'Sofiquil', 80000, 10);

insert into employee(emp_id,emp_name,salary,dep_id) values(emp_seq.nextval,'Mortuza', 90000, 20);

insert into employee(emp_id,emp_name,salary,dep_id) values(emp_seq.nextval,'Rojina', 75000, 30);

insert into employee(emp_id,emp_name,salary,dep_id) values(emp_seq.nextval,'Ajat', 85000, 30);

e) create view emp_view as select emp_id,emp_name,salary, country, dep_id from employee;

f) select view_name from user_views;

g) create synonym emp_syn for employee;

h) select * from employee;

select * from emp_view;

```
select * from emp_syn;
```

6.

```
a) update department set department_name='SALES' where dep_id=30;
```

```
b) alter table department add email varchar2(25) unique;
```

```
create table teacher(
```

```
    t_id number(2) primary key,
```

```
    t_name varchar2(30) not null,
```

```
    salary number(7,2) check(salary >5000),
```

```
    phone number(11) unique,
```

```
    joining_date date default sysdate);
```

```
insert into teacher(t_id, t_name, salary, phone) values(01,'Mostafizur', 30000, 01730959439);
```

```
insert into teacher(t_id, t_name, salary, phone) values(02,'Sofiqui', 32000, 01730959400);
```

```
create table student(id number(2) primary key,
```

```
    name varchar2(30) not null,
```

```
    education varchar2(30),
```

```
    district varchar2(50),
```

```
    t_id number(2), constraint stu_tec_fk foreign key (t_id) references teacher(t_id));
```

```
insert into student(id, name, education, district, t_id) values(11,'Momin', 'HSC','Tangail',01);
```

```
insert into student(id, name, education, district, t_id) values(12,'Al-amin', 'HSC','Tangail',02);
```

```
create or replace view tec_stu AS select s.name, s.id , t.t_id from teacher t ,student s where t.t_id=s.t_id;
```

```
create table test(
```

```
    id number(2) primary key,
```

```
    name varchar2(15) not null);
```

```
create sequence test_seq start with 50 increment by 5 maxvalue 100;
```

```
insert into test(id,name) values(test_seq.nextval,'Mostafuz');
```

```
insert into test(id,name) values(test_seq.nextval,'Minhan');
```

```
update test set name='Mostafizur' where id=50;
```

```
create table dep(
```

```
    id number(2) primary key,
```

```
    name varchar2(15) not null);
```

```
create sequence dept_deptid_seq increment by 10 start with 120 maxvalue 9999 nocache nocycle;
```

```
insert into test(id,name) values(dept_deptid_seq.nextval, 'Rahim');
```

```
alter table test modify(id number(4));
```

```
describe test;
```

```
select * from test;
```

```
create sequence tes_seq start with 50 increment by 5 maxvalue 80;
```

```
create table test2(id number(2), name varchar2(30));
```

```
insert into test2(id,name) values(tes_seq.nextval,'Mostafizur');
```

```
insert into test2(id,name) values(tes_seq.nextval,'Sofiqul');
```

```
insert into test2(id,name) values(tes_seq.nextval,'Mortuza');
```

```
insert into test2(id,name) values(tes_seq.nextval,'Rojina');
```

```
=====show table=====
```

```
select table_name from user_tables;
```

```
=====show view=====
```

```
select view_name from user_views;
```

```
=====show sequence=====
```

```
select sequence_name from user_sequences;
```

```
=====other user but show other table=====
```

```
select * from hr.employees;
```

```
=====update sequence=====
```

```
alter sequence tes_seq increment by 90 maxvalue 9999;
```

```
insert into test2(id,name) values(tes_seq.nextval,'Minhan');
```

```
create sequence tes_seq start with 50 increment by 5 maxvalue 80;
```

```
create table dep(id number(3) primary key, name varchar2(20) not null);
```

```
create table emp(
```

```
    em_id number(3) primary key,
```

```
    name varchar2(20) not null,
```

```
    salary number(7) check(salary < 50000),
```

```
    phone varchar2(15) unique,
```

```
    id number(3), constraint dep_emp_fk foreign key (id) REFERENCES dep(id));
```

```
alter table dep modify(name varchar2(20));
```

```
create sequence dep_seq start with 50 increment by 10 maxvalue 100;
```

```
insert into dep(id, name) values(dep_seq.nextval,'a');
```

```
insert into dep(id, name) values(dep_seq.nextval,'b');
```

```
insert into dep(id, name) values(dep_seq.nextval,'c');
```

```
insert into dep(id, name) values(dep_seq.nextval,'d');
```

```
create sequence emp_seq start with 1 increment by 5 maxvalue 200;
```

```
insert into emp(em_id, name, salary, phone, id) values(emp_seq.nextval,'Mostafiz', 40000, 01730-959439,50);
```

```
insert into emp(em_id, name, salary, phone, id) values(emp_seq.nextval,'Sofiqui', 42000, 01748-567000,60);
```

```
insert into emp(em_id, name, salary, phone, id) values(emp_seq.nextval,'Ajat', 42000, 01748-567111,70);
```

```
insert into emp(em_id, name, salary, phone, id) values(emp_seq.nextval,'Ajat', 42000, '01748-000111',70);
```

```
create sequence emp3_seq start with 0 increment by 5 maxvalue 200 minvalue 0;
```

```
insert into emp(em_id, name, salary, phone, id) values(emp2_seq.nextval,'Ajat', 42000, 01748-567112,70);
```

```
insert into emp(em_id, name, salary, phone, id) values(emp2_seq.nextval,'Ajat', 42000, 01748-567113,70);
```

```
insert into emp(em_id, name, salary, phone, id) values(emp2_seq.nextval,'Ajat', 42000, 01748-577113,70);
```

```
=====update row=====
```

```
update dep set name='dfdfdfdsfda' where id=50;
```

```
update dep set name='Russia' where id=80;
```

Open SQL Comand Line Tool

```
1=====Login as System=====
```

```
connect
```

```
username: system
```

```
password: sys
```

```
2=====
```

```
show user
```

```
3=====
```

```
clear screen
```

```
4=====Create New User Like idb=====
```

```
create user idb identified by idb
```

```
5===== Give Grant Permission=====
```

```
grant dba to idb
```

```
6=====Find out DBA User List OR Database Name=====
```

```
select USERNAME, DEFAULT_TABLESPACE from DBA_USERS;
```

```
7=====Create Table =====
```

```
create table test(
```

```
    id    NUMBER(5) PRIMARY KEY,
```

```
    ename  VARCHAR2(15) NOT NULL,
```

```
salary    NUMBER(7,2));
```

```
8=====Show Table List=====
```

```
select table_name from user_tables;
```

```
select table_name from all_tables;
```

```
9=====Show Details Of A Table=====
```

```
describe test;
```

```
10=====Query Table=====
```

```
select * from test;
```

```
11=====Insert Data Into Table=====
```

```
insert into test(id, ename, salary) values(110,'Israt Akter',42000);
```

```
12=====show autocommit=====
```

```
show autocommit
```

```
13=====Make autocommit on=====
```

```
set autocommit on
```

```
14=====Substitution Variables=====
```

```
select * from &abc where id=&iddddd;
```

```
Enter value for abc: test
```

```
Enter value for iddddd: 105
```

```
old  1: select * from &abc where id=&iddddd
```

```
new  1: select * from test where id=105
```

ID	ENAME	SALARY
----	-------	--------

```
-----
```

105	Moly Akter	40000
-----	------------	-------

```
=====Unlock a user=====
```

```
CONNECT SYS as SYSDBA
```

```
alter user hr identified by hr ACCOUNT UNLOCK;
```

2.

a) create table department(

dep_id number(3) primary key,

dep_name varchar2(20) not null);

b) create table employee(

emp_id number(3) primary key,

emp_name varchar2(25),

salary number(5) check(salary>20000),

phone varchar2(15) unique,

join_date date default sysdate,

country varchar2(20) default 'Bangladesh');

c) select table_name from user_tables;

describe department;

describe employee;

alter table employee add (dep_id number(3), constraint emp_dep_fk foreign key (dep_id) references department(dep_id));

3.

a) create sequence dep_seq start with 10 increment by 5 maxvalue 100;

create sequence emp_seq start with 20 increment by 10 maxvalue 200;

select sequence_name from user_sequences;

4.

select index_name from user_indexes;

create index dep_name_ind on

Oracle ALTER TABLE Statement

=====ADD New Column=====

ALTER TABLE customers

ADD customer_age varchar2(50);

=====ADD Multiple columns=====

ALTER TABLE customers

ADD (customer_type varchar2(50),

customer_address varchar2(50));

=====MODIFY New Column=====

ALTER TABLE customers

MODIFY customer_name varchar2(100) not null;

=====MODIFY Multiple Column=====

ALTER TABLE customers

MODIFY (customer_name varchar2(100) not null,

city varchar2(100));

=====DROP A Column=====

ALTER TABLE customers

DROP COLUMN customer_name;

=====RENAME Column=====

ALTER TABLE customers

RENAME COLUMN customer_name to cname;

=====RENAME Table=====

ALTER TABLE customers

RENAME TO retailers;

1.create an user name eid

2. create following tables;

A. department

Fields: dep_id, department_name

B. employee

Fields: emp_id, emp_name, mobile unique, salary more than 10000,

joining_date using default, country default as BD,

dep_id Foreign Key with department

C. Show Both table Structres.

3. Create sequence for

A. department incremented by 10

B. employee incremented by 5

C. Show created sequence list.

4. Department table:

A. show index

B. create an index for the column department_name

C. show index again.

D. Insert 3 data's to departments for ADMIN, SOFTWARE and MARKETING

using Sequence.

E. create view for department

F. Show View List

G. create synonym for table and View

H. retrieve data from view, table synonym and view synonym.

5. Employee table:

A. show index

B. create an index for the column emp_name

C. show sequence again.

D. Insert 5 data's to employee

E. create view for employee
F. Show View List
G. create synonym for table and View
H. retrieve data from view, table synonym and view synonym.

B. add new column at employee table like email unique
C. update first row of employee table with department SALES.
D.

C. update first row of employee table with department SALES.

D.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.
