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,'Sofiqul', 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,'Sofiqul', 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(2) 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,'Sofiqul', 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=&idddddd;

Enter value for abc: test

Enter value for idddddd: 105

old 1: select \* from &abc where id=&idddddd

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

using sequence.

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.

6. A. update MARKETING department to SALES

B. add new column at employee table like email unique

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

D.