**SET:- 1**

**DEPARTMENT (dept\_no, dept\_name, location)**

**1. Create the Simple DEPARTMENT Table.**

create table tbl\_department

(

dept\_no numeric(3),

dept\_name varchar(30),

location varchar(30)

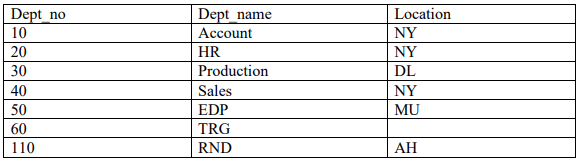
);

**2. Display structure of department table.**

desc tbl\_department;

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table** | **Column** | **Data Type** | **Length** | **Precision** | **Scale** | **Primary Key** | **Nullable** | **Default** | **Comment** |
| [TBL\_DEPARTMENT](javascript:ret_Column('SYSTEM.TBL_DEPARTMENT');) | [DEPT\_NO](javascript:ret_Column('DEPT_NO');) | Number | - | 4 | 0 | 1 | - | - | - |
|  | [DEPT\_NAME](javascript:ret_Column('DEPT_NAME');) | Varchar2 | 30 | - | - | - | nullable | - | - |
|  | [LOCATION](javascript:ret_Column('LOCATION');) | Varchar2 | 30 | - | - | - | nullable | - | - |

**3. Insert below records into Department Table.**

****

insert into tbl\_department values(10,'Account','NY');

insert into tbl\_department values(20,'HR','NY');

insert into tbl\_department values(30,'Production','DL');

insert into tbl\_department values(40,'Sales','NY');

insert into tbl\_department values(50,'EDP','MU');

insert into tbl\_department values(60,'TRG','');

insert into tbl\_department values(110,'RND','AH');

insert into tbl\_department values(10,'RND','AH');

**4. Display all records of Department table**

select \* from tbl\_department;

|  |  |  |
| --- | --- | --- |
| **DEPT\_NO** | **DEPT\_NAME** | **LOCATION** |
| 10 | IT | NY |
| 20 | HR | NY |
| 30 | Production | DL |
| 40 | MBA | NY |
| 50 | EDP | MU |
| 60 | TRG | - |
| 110 | RND | Ahmedabad |

**5. select \* from tbl\_department;**

select dept\_name from tbl\_department where location='NY';

|  |
| --- |
| **DEPT\_NAME** |
| IT |
| HR |
| MBA |

**6. Display details of Department 10**

select \* from tbl\_department where dept\_no=10;

|  |  |  |
| --- | --- | --- |
| **DEPT\_NO** | **DEPT\_NAME** | **LOCATION** |
| 10 | IT | NY |

**7. List all department names starting with 'A'**

select dept\_name from tbl\_department where dept\_name like 'A%';

|  |
| --- |
| **DEPT\_NAME** |
| ABC |
| Account |

**8. List all departments whose number is between 1 and 100**

select dept\_name from tbl\_department where dept\_no between 1 and 100;

|  |
| --- |
| **DEPT\_NAME** |
| IT |
| HR |
| Production |
| MBA |
| EDP |
| TRG |

**9. Delete 'TRG' department**

delete from tbl\_department where dept\_name='TRG';

**10. Change department name 'EDP' to 'IT**

update tbl\_department set dept\_name='IT' where dept\_name='EDP';

**Set:-2**

**create table tbl\_EMPLOYEE**

(

emp\_id int primary key,

emp\_name varchar2(15),

birth\_date date,

gender varchar2(6),

dept\_no numeric(3) references tbl\_department(dept\_no),

address varchar2(25),

designation varchar2(25),

salary decimal(18,2) constraint chk\_salary check(salary>0),

experience int,

email varchar2(25) constraint chk\_emp\_email check(REGEXP\_LIKE(email,'^[A\_Za-z0-9.\_%+]+@[A-Za-z0-9.\_]+\.[A-Za-z]{2,4}$'))

);

//add constraint on designation

alter table tbl\_employee add constraint chk\_designation check(designation in('manager','clerk','leader','analyst','designer','coder','tester'));

**create table tbl\_department**

(

dept\_no numeric(3) primary key,

dept\_name varchar(30),

location varchar(30)

);

**1. Create the EMP Table with all necessary constraints such as In EMP TABLE: Employee id should be primary key, Department no should be Foreign key, employee age (birth\_date) should be greater than 18 years, salary should be greater than zero, email should have (@ and dot) sign in address, designation of employee can be “manager”, “clerk”, “leader”, “analyst”, “designer”, “coder”, “tester”.**

//employee age (birth\_date) should be greater than 18 years

alter table tbl\_employee add constraint bdate check(birth\_date > '01-jan-1995')

//add constraint on designation

alter table tbl\_employee add constraint chk\_designation check(designation in('manager','clerk','leader','analyst','designer','coder','tester'));

**2. Create DEPT table with neccessary constraint such as**

**create table tbl\_department**

(

dept\_no numeric(3) primary key,

dept\_name varchar(30),

location varchar(30)

);

alter table tbl\_department add constraint chk\_name unique(dept\_name);

**3. Department no should be primary key, department name should be unique.**

alter table tbl\_department add constraint chk\_name unique(dept\_name);

**4. After creation of above tables, modify Employee table by adding the constraints as**

alter table tbl\_employee add constraint chk\_gender check(gender in('Male','Female'));

**5. ‘Male’ or ‘Female’ in gender field and display the structure.**

alter table tbl\_employee add constraint chk\_gender check(gender in('Male','Female'));

**6. Insert proper data (at least 5 appropriate records) in all the tables.**

**Tbl\_employee**

insert into tbl\_employee values(1,'keyur','04-09-1999','Male',10,'Bardoli','Software Developer',40000,6,'kr12@gmai.com');

insert into tbl\_employee values(2,'yogita','08-08-1999','Female',20,'Vankaner','Web Developer',35000,1,'yogi12@gmai.com');

insert into tbl\_employee values(3,'mayuri','12-15-1995','Female',30,'Amalsadi','Tester',45000,3,'mayuri1215@gmail.com');

insert into tbl\_employee values(4,'ketan','12-15-1991','Male',50,'Amalsadi','Software Testing',50000,5,'ketan20@gmai.com');

insert into tbl\_employee values(5,'foram','01-06-1996','Female',110,'Patel Faliyu','Designer',35000,4,'forem01@gmai.com');

insert into tbl\_employee values(6,'janvi','24-09-2000','Female',40,'Baben','coder',50000,3,'janvi24@gmai.com');

insert into tbl\_employee values(7,'hemal','25-12-2001','Male',50,'Baben','Tester',25000,2,'hemal25@gmai.com');

**tbl\_department**

insert into tbl\_department values(10,'Account','NY');

insert into tbl\_department values(20,'HR','NY');

insert into tbl\_department values(30,'Production','DL');

insert into tbl\_department values(40,'Sales','NY');

insert into tbl\_department values(50,'EDP','MU');

insert into tbl\_department values(60,'TRG','');

insert into tbl\_department values(110,'RND','AH');

insert into tbl\_department values(120,'account','Ahmedabad');

**7. Describe the structure of table created.**

desc tbl\_department;

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table** | **Column** | **Data Type** | **Length** | **Precision** | **Scale** | **Primary Key** | **Nullable** | **Default** | **Comment** |
| [TBL\_DEPARTMENT](javascript:ret_Column('SYSTEM.TBL_DEPARTMENT');) | [DEPT\_NO](javascript:ret_Column('DEPT_NO');) | Number | - | 4 | 0 | 1 | - | - | - |
|  | [DEPT\_NAME](javascript:ret_Column('DEPT_NAME');) | Varchar2 | 30 | - | - | - | nullable | - | - |
|  | [LOCATION](javascript:ret_Column('LOCATION');) | Varchar2 | 30 | - | - | - | nullable | - | - |

desc tbl\_employee;

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table** | **Column** | **Data Type** | **Length** | **Precision** | **Scale** | **Primary Key** | **Nullable** | **Default** | **Comment** |
| [TBL\_EMPLOYEE](javascript:ret_Column('SYSTEM.TBL_EMPLOYEE');) | [EMP\_ID](javascript:ret_Column('EMP_ID');) | Number | - | 4 | 0 | 1 | - | - | - |
|  | [EMP\_NAME](javascript:ret_Column('EMP_NAME');) | Varchar2 | 20 | - | - | - | nullable | - | - |
|  | [BIRTH\_DATE](javascript:ret_Column('BIRTH_DATE');) | Date | 7 | - | - | - | nullable | - | - |
|  | [GENDER](javascript:ret_Column('GENDER');) | Varchar2 | 6 | - | - | - | nullable | - | - |
|  | [DEPT\_NO](javascript:ret_Column('DEPT_NO');) | Number | - | 4 | 0 | - | nullable | - | - |
|  | [ADDRESS](javascript:ret_Column('ADDRESS');) | Varchar2 | 100 | - | - | - | nullable | - | - |
|  | [DESIGNATION](javascript:ret_Column('DESIGNATION');) | Varchar2 | 15 | - | - | - | nullable | - | - |
|  | [SALARY](javascript:ret_Column('SALARY');) | Number | - | 9 | 2 | - | nullable | - | - |
|  | [EXOERIENCE](javascript:ret_Column('EXOERIENCE');) | Varchar2 | 5 | - | - | - | nullable | - | - |
|  | [EMP\_EMAIL](javascript:ret_Column('EMP_EMAIL');) | Varchar2 | 50 | - | - | - | nullable | - | - |

**8. List all records of each table in ascending order.**

department table order by department number

select \* from tbl\_department order by dept\_no asc;

|  |  |  |
| --- | --- | --- |
| **DEPT\_NO** | **DEPT\_NAME** | **LOCATION** |
| 10 | IT | NY |
| 20 | HR | NY |
| 30 | Production | DL |
| 40 | MBA | NY |
| 50 | EDP | MU |
| 60 | TRG | - |
| 110 | RND | Ahmedabad |

employee table ordering by employee name

select \* from tbl\_employee order by emp\_id asc;

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMP\_ID** | **EMP\_NAME** | **BIRTH\_DATE** | **GENDER** | **DEPT\_NO** | **ADDRESS** | **DESIGNATION** | **SALARY** | **EXOERIENCE** | **EMP\_EMAIL** |
| 1 | keyur | 04-SEP-99 | Male | 10 | Bardoli | coder | 5500 | 6 | kr@gmail.com |
| 2 | rahul | 05-AUG-95 | Male | 10 | vyara | analyst | 2200 | 2 | rahul@gmail.com |
| 3 | brijesh | 04-APR-92 | Male | 30 | valod | designer | 1000 | 2 | brijesh@gmail.com |
| 4 | Alma | 04-JAN-94 | Female | 40 | surat | manager | 4000 | 1 | ruhi@gmail.com |
| 5 | sneha | 10-OCT-93 | Female | 60 | Bardoli | tester | 6000 | 0 | sneha@gmail.com |

**9. Delete the department whose loction is Ahmedabad.**

delete from tbl\_department where location='ahmedabad';

**10. Display female employee list.**

select \* from tbl\_employee where gender='Female';

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMP\_ID** | **EMP\_NAME** | **BIRTH\_DATE** | **GENDER** | **DEPT\_NO** | **ADDRESS** | **DESIGNATION** | **SALARY** | **EXOERIENCE** | **EMP\_EMAIL** |
| 4 | Alma | 04-JAN-94 | Female | 40 | surat | manager | 4000 | 1 | ruhi@gmail.com |
| 5 | sneha | 10-OCT-93 | Female | 60 | Bardoli | tester | 6000 | 0 | sneha@gmail.com |

**11. Display Departname wise employee Names.**

select dept\_name,emp\_name from tbl\_department,tbl\_employee where tbl\_department.dept\_no=tbl\_employee.dept\_no;

|  |  |
| --- | --- |
| **DEPT\_NAME** | **EMP\_NAME** |
| IT | rahul |
| IT | keyur |
| Production | brijesh |
| MBA | Alma |
| TRG | sneha |

**12. Find the names of the employee who has salary less than 5000 and greater than 2000.**

select emp\_name from tbl\_employee where salary > 2000 and salary < 5000;

|  |
| --- |
| **EMP\_NAME** |
| rahul |
| Alma |

**13. Display the names and the designation of all female employee in descending order.**

select emp\_name,designation from tbl\_employee where gender='Female' order by emp\_name desc;

|  |  |
| --- | --- |
| **EMP\_NAME** | **DESIGNATION** |
| sneha | tester |
| Alma | manager |

**14. Display the names of all the employees who names starts with ‘A’ ends with ‘A’.**

select emp\_name from tbl\_employee where emp\_name like 'A%A';

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMP\_ID** | **EMP\_NAME** | **BIRTH\_DATE** | **GENDER** | **DEPT\_NO** | **ADDRESS** | **DESIGNATION** | **SALARY** | **EXPERIENCE** | **EMAIL** |
| 9 | AkashA | 05/05/2000 | Female | 20 | jankhvav | coder | 7000 | 2 | akasha@gmail.com |

**15. Find the name of employee and salary for those who had obtain minimum salary.**

select emp\_name,salary from tbl\_employee where salary=(select min(salary) from tbl\_employee);

|  |  |
| --- | --- |
| **EMP\_NAME** | **SALARY** |
| brijesh | 1000 |

**16. Add 10% raise in salary of all employees whose department is ‘IT’.**

**17. Count total number of employees of ‘IT’ department.**

select count(emp\_id) from tbl\_employee,tbl\_department where tbl\_employee.dept\_no=tbl\_department.dept\_no and tbl\_department.dept\_name='IT';

|  |
| --- |
| **COUNT(EMP\_ID)** |
| 2 |

**18. List all employees who born in the current month.**

SELECT \* FROM tbl\_employee WHERE to\_char(birth\_date,'mon')=to\_char(sysdate,'mon');

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMP\_ID** | **EMP\_NAME** | **BIRTH\_DATE** | **GENDER** | **DEPT\_NO** | **ADDRESS** | **DESIGNATION** | **SALARY** | **EXPERIENCE** | **EMAIL** |
| 8 | parth | 11/26/1999 | Male | 20 | Bardoli | Developer | 50000 | 7 | kamle26@gmai.com |

**19. Print the record of employee and dept table as “Employee works in department ‘MBA’.**

select E.emp\_id,E.emp\_name,E.birth\_date,E.gender,E.address,E.designation,E.salary,D.dept\_name,D.location from tbl\_employee E inner join tbl\_department D on E.dept\_no=D.dept\_no where D.dept\_name='MBA';

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMP\_ID** | **EMP\_NAME** | **BIRTH\_DATE** | **GENDER** | **ADDRESS** | **DESIGNATION** | **SALARY** | **DEPT\_NAME** | **LOCATION** |
| 4 | Alma | 04-JAN-94 | Female | surat | manager | 4000 | MBA | NY |

**20. List names of employees who are fresher’s (less than 1 year of experience).**

select \* from tbl\_employee where experience < 1;

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMP\_ID** | **EMP\_NAME** | **BIRTH\_DATE** | **GENDER** | **DEPT\_NO** | **ADDRESS** | **DESIGNATION** | **SALARY** | **EXOERIENCE** | **EMP\_EMAIL** |
| 5 | sneha | 10-OCT-93 | Female | 60 | Bardoli | tester | 6000 | 0 | sneha@gmail.com |

**21. List department wise names of employees who has more than 5 years of experience.**

select emp\_name,dept\_name from tbl\_employee e,tbl\_department d where e.dept\_no=d.dept\_no and e.experience > 5;

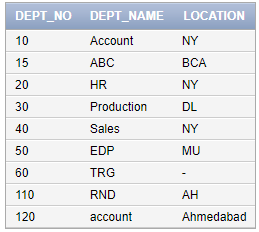
|  |  |
| --- | --- |
| **EMP\_NAME** | **DEPT\_NAME** |
| keyur | IT |

**22. Create Sequence to generate department ID.**

create sequence sq\_department1 start with 15 increment by 1;

insert into tbl\_department values(sq\_department1.nextval,'ABC','BCA');

select \* from tbl\_department order by dept\_no asc;



**23. List department having no employees.**

select dept\_name from tbl\_department d WHERE NOT EXISTS(select \* from tbl\_employee e where e.dept\_no=d.dept\_no);

|  |
| --- |
| **DEPT\_NAME** |
| IT |
| ABC |
| Sales |
| account |

**Set:-3**

**STUDENT (rollno, name, class, birthdate)**

create table tbl\_STUDENT

( rollno int primary key,

name varchar2(20),

class varchar2(5),

birthdate date

);

**COURSE (courseno, coursename, max\_marks, pass\_marks)**

create table tbl\_COURSE

(

courseno int primary key,

coursename varchar2(10),

max\_marks number(3),

pass\_marks number(3)

);

**SC (rollno, courseno, marks)**

create table SC

(

rollno int references tbl\_student(rollno),

courseno int references tbl\_course(courseno),

marks number(3) constraint chk\_marks check(marks>0 and marks<100)

);

**1. Create the above three tables along with key constraints.**

create table tbl\_STUDENT

( rollno int primary key,

name varchar2(20),

class varchar2(5),

birthdate date

);

create table tbl\_COURSE

(

courseno int primary key,

coursename varchar2(10),

max\_marks number(3),

pass\_marks number(3)

);

create table SC

(

rollno int references tbl\_student(rollno),

courseno int references tbl\_course(courseno),

marks number(3) constraint chk\_marks check(marks>0 and marks<100)

);

**2. Write an Insert script for insertion of rows with substitution variables and insert appropriate data.**

insert into tbl\_student values(1,'kesha','MCA-1','04-09-1999');

insert into tbl\_student values(2,'Yogi','MCA-3','08-08-2000');

insert into tbl\_student values(3,'neel','MCA-1','10-02-1997');

insert into tbl\_student values(4,'siya','MCA-1','08-03-1997');

insert into tbl\_student values(5,'nehage','MCA-2','08-11-1998');

insert into tbl\_student values(6,'krishna','MCA-1','08-11-1999');

insert into tbl\_student values(7,'priti','MCA-1','04-12-1995');

insert into tbl\_student values(8,'trisha','MCA-2','04-12-1980');

insert into tbl\_student values(9,'trishi','MCA-2','04-11-1983');

insert into tbl\_course values(01,'java',50,20);

insert into tbl\_course values(02,'database management system',70,25);

insert into tbl\_course values(03,'maths',80,30);

insert into tbl\_course values(04,'php',80,30);

insert into tbl\_course values(05,'c',40,20);

insert into tbl\_course values(06,'computer networking',100,34);

insert into sc values(1,03,75);

insert into sc values(2,02,65);

insert into sc values(3,01,35);

insert into sc values(4,05,35);

insert into sc values(5,04,75);

insert into sc values(01,06,70);

**3. Add a constraint that the marks entered should strictly be between 0 and 100.**

alter table sc add constraint chk\_marks check(marks>0 and marks<100)

**4. While creating SC table, composite key constraint was forgotten. Add the composite keynow.**

alter table sc add foreign key(rollno) references tbl\_student(rollno)

alter table sc add foreign key(courseno) references tbl\_course(courseno)

**5. Display details of student who takes ‘Database Management System’ course.**

select \* from tbl\_student t,tbl\_course c,sc s where t.rollno=s.rollno and c.courseno=s.courseno and c.coursename='database management system';

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ROLLNO** | **NAME** | **CLASS** | **BIRTHDATE** | **COURSENO** | **COURSENAME** | **MAX\_MARKS** | **PASS\_MARKS** | **ROLLNO** | **COURSENO** | **MARKS** |
| 2 | Yogi | MCA-3 | 08/08/2000 | 2 | database management system | 70 | 25 | 2 | 2 | 65 |

**6. Display the names of students who have scored more than 70% in Computer Networksand have not failed in any subject.**

select \* from tbl\_student,tbl\_course,sc where marks>70 and coursename='computer networking' and sc.rollno in(select rollno from sc where rollno not in(select rollno from sc,tbl\_course where marks<tbl\_course.pass\_marks)) and tbl\_student.rollno=sc.rollno;

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ROLLNO** | **NAME** | **CLASS** | **BIRTHDATE** | **COURSENO** | **COURSENAME** | **MAX\_MARKS** | **PASS\_MARKS** | **ROLLNO** | **COURSENO** | **MARKS** |
| 5 | nehage | MCA-2 | 08/11/1998 | 6 | computer networking | 100 | 34 | 5 | 4 | 75 |
| 1 | kesha | MCA-1 | 04/09/1999 | 6 | computer networking | 100 | 34 | 1 | 3 | 75 |

**7. Display the average marks obtained by each student.**

select rollno,avg(marks)"avg" from sc group by rollno;

|  |  |
| --- | --- |
| **ROLLNO** | **avg** |
| 1 | 72.5 |
| 2 | 65 |
| 5 | 75 |
| 4 | 35 |
| 3 | 35 |

**8. Select all courses where passing marks are more than 30% of average maximum mark.**

select coursename from tbl\_course where pass\_marks>(select avg(max\_marks)\*30/100 from tbl\_course)

|  |
| --- |
| **COURSENAME** |
| database management system |
| php |
| computer networking |
| maths |

**9. Display details of students who are born in 1980 or 1982.**

select \* from tbl\_student where to\_char(birthdate,'yyyy') between 1980 and 1982.

|  |  |  |  |
| --- | --- | --- | --- |
| **ROLLNO** | **NAME** | **CLASS** | **BIRTHDATE** |
| 8 | trisha | MCA-2 | 04/12/1980 |

**10. Create a view that displays student courseno and its corresponding marks.**

create view student\_view as select t.rollno,t.name,c.courseno from tbl\_student t,tbl\_course c,sc s where t.rollno=s.rollno and c.courseno=s.courseno

select \* from student\_view

|  |  |  |
| --- | --- | --- |
| **ROLLNO** | **NAME** | **COURSENO** |
| 2 | Yogi | 2 |
| 4 | siya | 5 |
| 1 | kesha | 6 |
| 1 | kesha | 3 |
| 3 | neel | 1 |
| 5 | nehage | 4 |

**SET:-4**

**EMPLOYEE (emp\_id, emp\_name, birth\_date, gender, dept\_no, address, designation, salary, experience, email)**

create table tbl\_employee1

(

emp\_id int primary key,

emp\_name varchar2(20),

birth\_date date,

gender varchar2(6),

dept\_no numeric(38) REFERENCES tbl\_depart(dept\_no),

address varchar2(100),

designation varchar2(15),

salary decimal(9,2),

exoerience varchar2(5),

emp\_email varchar2(50) CONSTRAINT chk\_email CHECK(REGEXP\_LIKE(emp\_email,'^[A-Za-z0-9.\_%+]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,4}$'))

);

insert into tbl\_employee values(1,'AmitA','','female',002,'surat','professor',20000,5,'amita0202@gmail.com');

insert into tbl\_employee values(2,'kesha','08-08-2000','female',002,'bardoli','professor',20000,2,'kesha@gmail.com');

insert into tbl\_employee values(3,'AsmitA','04-02-1999','female',001,'bardoli','professor',22000,8,'Amita0402@gmail.com');

insert into tbl\_employee values(4,'Keyur','09-03-1990','male',001,'mandavi','professor',22000,1,'Keyur0902@gmail.com');

insert into tbl\_employee values(5,'Yoglu','08-08-1995','male',003,'vyara','professor',11000,0,'Yoglu0909@gmail.com');

insert into tbl\_employee values(6,'Jenki','09-05-1995','male',004,'palsana','professor',15000,0.5,'jenil0506@gmail.com');

**DEPART (dept\_no, dept\_name, total\_employees, location)**

create table tbl\_DEPART

(

dept\_no int primary key,

dept\_name varchar2(20),

total\_employees number(3),

location varchar2(15)

);

insert into tbl\_depart values(001,'MCA',8,'B-1,3rd-floor');

insert into tbl\_depart values(002,'MBA',8,'B-1,g-floor');

insert into tbl\_depart values(003,'CIVIL',8,'B-2,1st-floor');

insert into tbl\_depart values(004,'CE',8,'B-2,2nd-floor');

insert into tbl\_depart values(005,'BCA',8,'B-1,2nd-floor');

**PROJECT (proj\_id, type\_of\_project, status, start\_date, emp\_id)**

create table tbl\_PROJECT

(

proj\_id int primary key,

type\_of\_project varchar2(15),

status varchar2(15),

start\_date date,

emp\_id int references tbl\_employee(emp\_id)

);

insert into tbl\_project values(0001,'web application','pass','09-04-2020',3);

insert into tbl\_project values(0002,'web application','continue','11-09-2020',4);

insert into tbl\_project values(0003,'mobile application','continue','11-12-2020',4);

insert into tbl\_project values(0004,'marketing','pass','09-03-2020',1);

insert into tbl\_project values(0005,'marketing','pass','03-25-2020',1);

1. **Delete the department whose total number of employees less than 1.**

delete from tbl\_DEPART where total\_employees<1

1. **Display the names and the designation of all female employee in descending order.**

select EMP\_NAME,DESIGNATION from tbl\_employee1 where GENDER='Female' order by Emp\_name asc;

|  |  |
| --- | --- |
| **EMP\_NAME** | **DESIGNATION** |
| Ayush | Maths Prof |
| Tanvi | engineering |

1. **Display the names of all the employees who names starts with ‘A’ ends with ‘A’.**

select EMP\_NAME from tbl\_employee1 where EMP\_NAME like 'A%A';

|  |
| --- |
| **EMP\_NAME** |
| AyushA |

1. **Find the name of employee and salary for those who had obtain minimum salary.**

select EMP\_NAME from tbl\_employee1 where SALARY=(select min(SALARY) from tbl\_employee1);

|  |
| --- |
| **EMP\_NAME** |
| Tanvi |

1. **Add 10% raise in salary of all employees whose department is ‘CIVIL’.**

update tbl\_employee1 set salary=salary+(salary\*10/100) where dept\_no=(select DEPT\_NO from tbl\_depart where DEPT\_NAME='CIVIL')

1. **Count total number of employees of ‘MCA’ department.**

select count(emp\_id) "employees of MCA" from tbl\_employee1 e,tbl\_depart d where e.DEPT\_NO=d.DEPT\_NO and d.dept\_no=(select DEPT\_NO from tbl\_depart where DEPT\_NAME='MCA')

|  |
| --- |
| **Employees Of MCA** |
| 1 |

1. **List all employees who born in the current month.**

select \* from tbl\_employee1 where to\_Char(BIRTH\_DATE,'MON')=to\_char(sysdate,'MON')

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMP\_ID** | **EMP\_NAME** | **BIRTH\_DATE** | **GENDER** | **DEPT\_NO** | **ADDRESS** | **DESIGNATION** | **SALARY** | **EXOERIENCE** | **EMP\_EMAIL** |
| 2 | Mayur | 04-DEC-95 | Male | 20 | Vyara | cvengineering | 36300 | 2 | mayur01@gmai.com |

1. **Print the record of employee and dept table as “Employee works in department ‘CE’.**

select e.EMP\_NAME,e.BIRTH\_DATE,e.GENDER,e.DEPT\_NO,e.ADDRESS,e.DESIGNATION,e.SALARY,e.EXOERIENCE,e.EMP\_EMAIL,d.DEPT\_NAME,d.TOTAL\_EMPLOYEES,d.LOCATION from tbl\_employee1 e, tbl\_depart d where e.DEPT\_NO=d.DEPT\_NO and d.DEPT\_NO=(select dept\_no from tbl\_depart where DEPT\_NAME='CE')

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMP\_NAME** | **BIRTH\_DATE** | **GENDER** | **DEPT\_NO** | **ADDRESS** | **DESIGNATION** | **SALARY** | **EXOERIENCE** | **EMP\_EMAIL** | **DEPT\_NAME** | **TOTAL\_EMPLOYEES** | **LOCATION** |
| Tanvi | 10-FEB-00 | Female | 30 | Surat | engineering | 3000 | 1 | Tanvi10@gmai.com | CE | 5 | Surat |

1. **List names of employees who are fresher’s(less than 1 year of experience).**

select \* from tbl\_employee1 where EXOERIENCE<1;

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMP\_ID** | **EMP\_NAME** | **BIRTH\_DATE** | **GENDER** | **DEPT\_NO** | **ADDRESS** | **DESIGNATION** | **SALARY** | **EXOERIENCE** | **EMP\_EMAIL** |
| 5 | AyushA | 03-MAR-97 | Female | 50 | Baleshwer | Maths Prof | 35000 | 0 | Ayush3@gmai.com |

1. **List department wise names of employees who has more than 5 years of experience.**

select DEPT\_NAME,EMP\_NAME from tbl\_employee e,tbl\_depart d where e.dept\_no=d.dept\_no and e.experience>5;

|  |  |
| --- | --- |
| **DEPT\_NAME** | **EMP\_NAME** |
| MCA | AsmitA |

**11. Write a function which will display total number of projects based on status (pass status as parameter).**

create or replace function total\_no\_project(s in varchar)

return number is pcount number;

begin

select count(\*)"number of project" into pcount from tbl\_project where status=s;

return pcount;

end;

**// call the function**

declare

pcounter number(2);

s varchar(10);

begin

s :='pass';

pcounter := total\_no\_project(s);

dbms\_output.put\_line(pcounter);

end;

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

3

Statement processed.

**12. Write a procedure that will display list of projects which is going to start today.**

create or replace procedure pstart\_date

IS pname varchar(25);

BEGIN

select type\_of\_project into pname from tbl\_project where start\_date=SYSDATE;

dbms\_output.put\_line('project start today is '|| pname);

END;

//Call the procedure

begin

pstart\_date;

end;

project start today is web application

Statement processed.

create or replace procedure pstart\_date

IS pname varchar(300);

BEGIN

for c in (select type\_of\_project into pname from tbl\_project)

loop

pname := c.type\_of\_project;

dbms\_output.put\_line('project start today is '|| pname);

end loop;

END;

// call the procedure

begin

pstart\_date;

end;

project start today is web application

project start today is mobile application

project start today is web application

project start today is marketing

project start today is marketing

Statement processed.

**13. Write a trigger which do not allow insertion/updation/deletion into Project table if status type is ‘pending’.**

create or replace trigger proj\_status\_emp

before insert OR update OR delete

ON

tbl\_project

for each row

begin

if :old.status = 'continue' then

raise\_application\_error(-20000,'can not delete update operation on panding project');

end if;

END;

**SET:-5**

**HOSTEL (HNO, HNAME, HADDR, TOTAL\_CAPACITY, WARDEN)**

create table tbl\_HOSTEL

(

HNO int primary key,

HNAME varchar2(15),

HADDR varchar2(15),

TOTAL\_CAPACITY number(3),

WARDEN varchar2(15)

);

insert into tbl\_hostel values(101,'shri hostel','nr-SBI,surat',20,'keyur');

insert into tbl\_hostel values(102,'chanakya hostel','bardoli-2',100,'rohit kamle');

insert into tbl\_hostel values(103,'goswami hostel','surat',300,'vikesh desai');

**ROOM (HNO, RNO, RTYPE, LOCATION, NO\_OF\_STUDENTS, STATUS)**

create table tbl\_ROOM

(

HNO int references tbl\_hostel(hno),

RNO int primary key,

RTYPE varchar2(15),

LOCATION varchar2(15),

NO\_OF\_STUDENTS number(3),

STATUS varchar2(15)

);

insert into tbl\_room values(101,105,'single-seated','ground floor',10,'vacant');

insert into tbl\_room values(102,104,'double-seated','first floor',20,'occupied');

insert into tbl\_room values(102,103,'double-seated','first floor',20,'occupied');

insert into tbl\_room values(101,106,'single-seated','ground floor',15,'occupied');

insert into tbl\_room values(102,102,'double-seated','first floor',15,'vacant');

insert into tbl\_room values(102,108,'double-seated','first floor',100,'occupied');

insert into tbl\_room values(103,109,'double-seated','first floor',200,'vacant');

**CHARGES (HNO, RTYPE, CHARGES)**

create table tbl\_CHARGES

(

HNO int references tbl\_hostel(hno),

RTYPE varchar2(15),

CHARGES number(4)

);

insert into tbl\_charges values(101,'single-seated',8000);

insert into tbl\_charges values(102,'single-seated',8000);

insert into tbl\_charges values(102,'double-seated',5000);

insert into tbl\_charges values(101,'double-seated',5000);

**STUDENT (SID, SNAME, MOBILE-NO, GENDER, FACULTY, DEPT, CLASS, HNO, RNO)**

create table tbl\_STUDENT1

(

SID int primary key,

SNAME varchar2(15),

MOBILE\_NO number(10),

GENDER varchar2(6),

FACULTY varchar2(15),

DEPT varchar2(15),

CLASS varchar2(15),

HNO int references tbl\_hostel(hno),

RNO int references tbl\_room(rno)

);

insert into tbl\_student1 values(1,'vinita','8974569741','female','smita mam','com-sci','MCA-1',101,105);

insert into tbl\_student1 values(2,'kanik','8974560041','male','jignesh sir','com-sci','MCA-1',102,103);

insert into tbl\_student1 values(3,'kinal','9974560041','female','niti mam','medical','biology',101,102);

insert into tbl\_student1 values(4,'nisant','9974556041','male','fenil sir','medical','biology',102,104);

insert into tbl\_student1 values(6,'jainika','9974786041','female','fenil sir','com-sci','MAC-2',101,102);

insert into tbl\_student1 values(7,'jatin','9974886041','male','gunesh sir','science','MAC-2',103,109);

**FEES (SID, FDATE, FAMOUNT)**

create table tbl\_FEES

(

SID int primary key,

FDATE date,

FAMOUNT number(4)

);

insert into tbl\_fees values(1,'03-21-2019',2500);

insert into tbl\_fees values(2,'12-21-2020',2500);

insert into tbl\_fees values(3,'01-12-2022',2500);

**1. Display the total number of rooms that are presently vacant.**

select count(rno)" total number of rooms" from tbl\_room where status='vacant';

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | |

|  |
| --- |
| **total number of rooms** |
| 3 |

**2. Display number of students of each faculty and department wise staying in each hostel.**

select s.sname,s.faculty,s.dept,r.rno from tbl\_room r,tbl\_student1 s where s.hno=r.rno order by s.dept asc;

|  |  |  |  |
| --- | --- | --- | --- |
| **SNAME** | **FACULTY** | **DEPT** | **RNO** |
| kanik | jignesh sir | com-sci | 102 |
| nisant | fenil sir | medical | 102 |
| jatin | gunesh sir | science | 103 |

**3. Display hostels, which have at least one single-seated room.**

select \* from tbl\_hostel h,tbl\_room r where h.hno=r.hno and r.rtype='single-seated';

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **HNO** | **HNAME** | **HADDR** | **TOTAL\_CAPACITY** | **WARDEN** | **HNO** | **RNO** | **RTYPE** | **LOCATION** | **NO\_OF\_STUDENTS** | **STATUS** |
| 101 | shri hostel | nr-SBI,surat | 20 | keyur | 101 | 105 | single-seated | ground floor | 10 | vacant |
| 101 | shri hostel | nr-SBI,surat | 20 | keyur | 101 | 106 | single-seated | ground floor | 15 | occupied |

**4. Display the warden name and hostel address of students of Computer Science department.**

select h.warden,h.hname,s.sname from tbl\_hostel h,tbl\_student1 s where h.hno=s.hno and s.dept='com-sci';

|  |  |  |
| --- | --- | --- |
| **WARDEN** | **HNAME** | **SNAME** |
| rohit kamle | chanakya hostel | kanik |
| keyur | shri hostel | vinita |
| keyur | shri hostel | jainika |

**5. Display those hostel details where single seated or double-seated rooms are vacant.**

select \* from tbl\_hostel where hno= any (select hno from tbl\_room where RTYPE='single-seated' or RTYPE='double-seated' and STATUS='vacant');

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **HNO** | **HNAME** | **HADDR** | **TOTAL\_CAPACITY** | **WARDEN** |
| 101 | shri hostel | nr-SBI,surat | 20 | keyur |
| 102 | chanakya hostel | bardoli-2 | 100 | rohit kamle |
| 103 | goswami hostel | surat | 300 | vikesh desai |

**6. Display details of hostels occupied by medical students.**

select \* from tbl\_hostel where hno= any (select hno from tbl\_student1 where dept='medical');

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **HNO** | **HNAME** | **HADDR** | **TOTAL\_CAPACITY** | **WARDEN** |
| 101 | shri hostel | nr-SBI,surat | 20 | keyur |
| 102 | chanakya hostel | bardoli-2 | 100 | rohit kamle |

**7. Display hostels, which are totally occupied to its fullest capacity.**

select \* from tbl\_hostel where hno= any (select hno from tbl\_room where status='occupied');

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **HNO** | **HNAME** | **HADDR** | **TOTAL\_CAPACITY** | **WARDEN** |
| 101 | shri hostel | nr-SBI,surat | 20 | keyur |
| 102 | chanakya hostel | bardoli-2 | 100 | rohit kamle |

**8. List details about students who are staying in the double-seated rooms of Chanakya Hostel.**

select s.sname,s.mobile\_no,s.class,h.hname,r.RTYPE from tbl\_student1 s,tbl\_room r,tbl\_hostel h where h.hname='chanakya hostel' and r.rno=any(select rno from tbl\_room where RTYPE='double-seated') and s.rno=r.rno;

or

select s.sname,s.mobile\_no,s.class,h.hname,r.RTYPE from tbl\_student1 s,tbl\_room r,tbl\_hostel h where s.rno=r.rno and h.hname='chanakya hostel' and r.RTYPE='double-seated';

|  |  |  |
| --- | --- | --- |
| **SNAME** | **MOBILE\_NO** | **CLASS** |
| kanik | 8974560041 | MCA-1 |
| nisant | 9974556041 | biology |
| jatin | 9974886041 | MAC-2 |
| kinal | 9974560041 | biology |
| jainika | 9974786041 | MAC-2 |

**9. Display the total number of students staying in each room type of each hostel.**

select sum(NO\_OF\_STUDENTS)"total number of students" from tbl\_room;

|  |
| --- |
| **total number of students** |
| 380 |

**10. Display details about students who have paid fees in the month of Nov. 2017.**

select \* from tbl\_student1 s,tbl\_fees f where s.sid=f.sid AND to\_char(f.fdate,'MM-YYYY')='11-2017';

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SID** | **SNAME** | **MOBILE\_NO** | **GENDER** | **FACULTY** | **DEPT** | **CLASS** | **HNO** | **RNO** | **SID** | **FDATE** | **FAMOUNT** |
| 1 | vinita | 8974569741 | female | smita mam | com-sci | MCA-1 | 101 | 105 | 1 | 11/01/2017 | 2500 |

**11. For those hostels where total capacity is more than 300, display details of students studying in Science faculty.**

select s.sname,s.dept,s.class from tbl\_student1 s,tbl\_hostel h where h.TOTAL\_CAPACITY>=300 and s.DEPT='science'

|  |  |  |
| --- | --- | --- |
| **SNAME** | **DEPT** | **CLASS** |
| jatin | science | MAC-2 |

**12. Display hostel details where there are at least 10 vacant rooms.**

select \* from tbl\_hostel where (hno) in (select hno from tbl\_room where status = 'vacant' AND (hno) in (select hno from tbl\_room group by hno having count(status)>10));

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **HNO** | **HNAME** | **HADDR** | **TOTAL\_CAPACITY** | **WARDEN** |
| 102 | chanakya hostel | bardoli-2 | 100 | rohit kamle |
| 101 | shri hostel | nr-SBI,surat | 20 | keyur |

**13. Display details of students who have still not paid fees.**

select \* from tbl\_student1 where sid not in(select sid from tbl\_fees);

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SID** | **SNAME** | **MOBILE\_NO** | **GENDER** | **FACULTY** | **DEPT** | **CLASS** | **HNO** | **RNO** |
| 4 | nisant | 9974556041 | male | fenil sir | medical | biology | 102 | 104 |
| 7 | jatin | 9974886041 | male | gunesh sir | science | MAC-2 | 103 | 109 |
| 6 | jainika | 9974786041 | female | fenil sir | com-sci | MAC-2 | 101 | 102 |

**14. Display those hostels where single-seated room is the costliest.**

select h.hname,h.haddr from tbl\_hostel h,tbl\_charges c where c.rtype='single-seated' and c.charges=(select max(charges) from tbl\_charges) and h.hno=c.hno;

|  |  |
| --- | --- |
| **HNAME** | **HADDR** |
| chanakya hostel | bardoli-2 |
| shri hostel | nr-SBI,surat |

**15. Write a trigger which do not allow to insert or update student record if mobile\_no length is less than 10 digits.**

create or replace trigger studentrec

before insert or update or delete on tbl\_student1

for each row

begin

IF :new.mobile\_no<10 THEN

raise\_application\_error(-20001,'mobile number 10 digit length');

END IF;

END;

Trigger created.

**16. Write a PL/SQL block which will count total number of student’s gender wise. Male Students: 999 students Female Students: 999 students**

DECLARE

mn number;

fn number;

BEGIN

select count(sid)into mn from tbl\_student1 where gender='male';

dbms\_output.put\_line('Male students:'||mn||'students');

select count(sid)into fn from tbl\_student1 where gender='female';

dbms\_output.put\_line('Female Students:'||fn||'Students');

END;

Male students: 3 students

Female Students: 3 Students

**SET:-6**

**DOCTOR (DNO, DNAME, SPECIALIZATION, CLINIC\_ADDR)**

create table tbl\_DOCTOR

(

DNO int primary key,

DNAME varchar2(15),

SPECIALIZATION varchar2(50),

CLINIC\_ADDR varchar2(25)

);

insert into tbl\_doctor values(1,'Dr.keyur','Medical Gastroenterology','mumbai');

insert into tbl\_doctor values(2,'Dr.yogi','psychologist','new delhi');

insert into tbl\_doctor values(3,'Dr.parmar','emergency medicine','gandhinagar');

insert into tbl\_doctor values(4,'Dr.modi','heart specialist','ahmedabad');

insert into tbl\_doctor values(5,'Dr.hudda','cancer specialist','chennai');

**MEDICINE (MNO, MNAME, TYPE, CONTENT, MANUFACTURER)**

create table tbl\_MEDICINE

(

MNO int primary key,

MNAME varchar2(25),

TYPE varchar2(15),

CONTENT varchar2(50),

MANUFACTURER varchar2(50)

);

insert into tbl\_medicine values('1','eupolio','liquid','medicine for polio','Actiza Pharmaceutical');

insert into tbl\_medicine values('2','Abraxane','captual','medicine for cancer','trishav Pharmaceutical');

insert into tbl\_medicine values('3','depressant','tablet','medicine for depression','desnict Pharmaceutical');

insert into tbl\_medicine values('4','AstraZeneca','injection','vecinne for virus','desnict Pharmaceutical');

insert into tbl\_medicine values('5','Bevacizumab','injection','vecinne','desnict Pharmaceutical');

insert into tbl\_medicine values('6','almotriptan malate','tablet','medicine for almotriptan ','nirmal Pharmaceutical');

**DISEASE (DISEASE\_NAME, SYMPTOM1, SYMPTOM2, SYMPTOM3)**

create table tbl\_DISEASE

(

DISEASE\_NAME varchar(20) primary key,

SYMPTOM1 varchar2(25),

SYMPTOM2 varchar2(25),

SYMPTOM3 varchar2(25)

);

insert into tbl\_disease values('polio','Vomiting','Fever','Sore throat');

insert into tbl\_disease values('cancer','Fatigue','Skin changes','Weight changes');

insert into tbl\_disease values('depression','lost intrest','sleep problem','looking at death');

insert into tbl\_disease values('covide','fever','dry cough','tiredness');

insert into tbl\_disease values('Liver cancer','skin become white','losing weight','feeling tired');

insert into tbl\_disease values('migraines','fiver','losing weight','feeling tired');

insert into tbl\_disease values('penicillin','new veriant','losing weight','feeling tired');

**TREATMENT (TNO, DNO, DISEASE\_NAME, MNO, DOSAGE, AVG\_CURE\_TIME)**

create table tbl\_TREATMENT

(

TNO int primary key,

DNO int references tbl\_doctor(dno),

DISEASE\_NAME references tbl\_disease(disease),

MNO int references tbl\_medicine(mno),

DOSAGE varchar2(15),

AVG\_CURE\_TIME date

);

insert into tbl\_treatment values(1,3,'covide','4','10ml',12);

insert into tbl\_treatment values(2,2,'depression','3','1',15);

insert into tbl\_treatment values(3,5,'cancer','2','5',45);

insert into tbl\_treatment values(4,3,'polio','1','5ml',2);

insert into tbl\_treatment values(5,1,'Liver cancer','5','5ml',5);

insert into tbl\_treatment values(6,5,'migraines','3','10ml',15);

insert into tbl\_treatment values(4,3,'penicillin','1','5ml',2);

**1. Display records of each table in ascending order.**

select d.DNO,d.DNAME,d.SPECIALIZATION,d.CLINIC\_ADDR,m.MNAME,m.TYPE,m.CONTENT,m.MANUFACTURER,i.DISEASE\_NAME,i.SYMPTOM1,i.SYMPTOM2,i.SYMPTOM3,t.DOSAGE,t.AVG\_CURE\_TIME from tbl\_doctor d,tbl\_MEDICINE m,tbl\_DISEASE i,tbl\_TREATMENT t where d.dno=t.dno and m.mno=t.mno and i.DISEASE\_NAME=t.DISEASE\_NAME order by d.dno asc;

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DNO** | **DNAME** | **SPECIALIZATION** | **CLINIC\_ADDR** | **MNAME** | **TYPE** | **CONTENT** | **MANUFACTURER** | **DISEASE\_NAME** | **SYMPTOM1** | **SYMPTOM2** | **SYMPTOM3** | **DOSAGE** | **AVG\_CURE\_TIME** |
| 1 | Dr.keyur | Medical Gastroenterology | mumbai | Bevacizumab | injection | vecinne | desnict Pharmaceutical | Liver cancer | skin become white | losing weight | feeling tired | 5ml | 5 |
| 2 | Dr.yogi | psychologist | new delhi | depressant | tablet | medicine for depression | desnict Pharmaceutical | depression | lost intrest | sleep problem | looking at death | 1 | 15 |
| 3 | Dr.parmar | emergency medicine | gandhinagar | eupolio | liquid | medicine for polio | Actiza Pharmaceutical | penicillin | new veriant | losing weight | feeling tired | 5ml | 2 |
| 5 | Dr.hudda | cancer specialist | chennai | Abraxane | captual | medicine for cancer | trishav Pharmaceutical | cancer | Fatigue | Skin changes | Weight changes | 5 | 45 |
| 5 | Dr.hudda | cancer specialist | chennai | depressant | tablet | medicine for depression | desnict Pharmaceutical | migraines | fiver | losing weight | feeling tired | 10ml | 15 |

**2. Count total number of doctors which has not given any treatment.**

select \* from tbl\_doctor where dno not in(select dno from tbl\_treatment).

|  |
| --- |
| **total number of doctors** |
| 1 |

**3. Display all Chennai doctors who treat cancer.**

select \* from tbl\_doctor where dno in(select dno from tbl\_treatment where DISEASE\_NAME='cancer')

|  |  |  |  |
| --- | --- | --- | --- |
| **DNO** | **DNAME** | **SPECIALIZATION** | **CLINIC\_ADDR** |
| 5 | Dr.hudda | cancer specialist | chennai |

**4. Remove disease “polio” from disease table as well as treatment table.**

delete from tbl\_treatment where DISEASE\_NAME='polio'

delete from tbl\_disease where DISEASE\_NAME='polio'

// delete from tbl\_disease where DISEASE\_NAME in (select DISEASE\_NAME from

// tbl\_treatment where DISEASE\_NAME='polio')

**5. Delete all those treatment related to liver of Dr.Shah.**

delete from tbl\_treatment where (dno) in (select dno from tbl\_doctor where dname='Dr.shah ');

**6. Create index on dno, Disease name in the treatment table.**

create index indx\_dno\_disease\_name on tbl\_treatment(dno,DISEASE\_NAME);

**7. Display details of doctors who treat migraines.**

select \* from tbl\_doctor where dno in(select dno from tbl\_treatment where DISEASE\_NAME='migraines');

|  |  |  |  |
| --- | --- | --- | --- |
| **DNO** | **DNAME** | **SPECIALIZATION** | **CLINIC\_ADDR** |
| 5 | Dr.hudda | cancer specialist | chennai |

**8. What is the maximum dosage of “penicillin” prescribe by the doctor for the treatment of any disease?**

select DISEASE\_NAME from tbl\_treatment where DOSAGE=(select max(DOSAGE) from tbl\_treatment)

|  |
| --- |
| **DISEASE\_NAME** |
| penicillin |
| Liver cancer |

**9. Display total number of disease treated by every doctor.**

select dno,count(DISEASE\_NAME)"disease" from tbl\_treatment group by dno;

|  |  |
| --- | --- |
| **DNO** | **disease** |
| 1 | 1 |
| 2 | 1 |
| 5 | 2 |
| 3 | 1 |

**10. Which doctor have no treatment for “depression”?**

select DNAME,SPECIALIZATION from tbl\_doctor where dno not in (select dno from tbl\_treatment where DISEASE\_NAME='depression')

|  |  |
| --- | --- |
| **DNAME** | **SPECIALIZATION** |
| Dr.modi | heart specialist |
| Dr.hudda | cancer specialist |
| Dr.keyur | Medical Gastroenterology |
| Dr.parmar | emergency medicine |

**11. Create a view which contains the treatment and doctors details. Make sure that no body is allowed to modify any detail in the view.**

create or replace view doctor\_treatments AS select d.dno,d.DNAME,d.SPECIALIZATION,d.CLINIC\_ADDR,t.DISEASE\_NAME from tbl\_doctor d,tbl\_treatment t where d.dno=t.dno with read only;

select \* from doctor\_treatments;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **DNO** | **DNAME** | **SPECIALIZATION** | **CLINIC\_ADDR** | **DISEASE\_NAME** |
| 1 | Dr.keyur | Medical Gastroenterology | mumbai | Liver cancer |
| 2 | Dr.yogi | psychologist | new delhi | depression |
| 3 | Dr.parmar | emergency medicine | gandhinagar | penicillin |
| 5 | Dr.hudda | cancer specialist | chennai | cancer |
| 5 | Dr.hudda | cancer specialist | chennai | migraines |

**12. Write a PL/SQL block to print the following report ( Symptoms wise print total number of medicine given ).**

declare

begin

dbms\_output.put\_line('\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_');

dbms\_output.put\_line('| Medicine | | Symptom2 | Symptom3 | Total |');

dbms\_output.put\_line('| | Symptom1 | | | |');

dbms\_output.put\_line('---------------------------------------------------------------------------------------------');

for c in (select m.MNAME,d.SYMPTOM1,d.SYMPTOM2,d.SYMPTOM3,t.dosage from tbl\_medicine m,tbl\_DISEASE d,tbl\_TREATMENT t where d.DISEASE\_NAME=t.DISEASE\_NAME and m.mno=t.mno)

loop

dbms\_output.put\_line('| '|| c.MNAME ||' | '|| c.Symptom1 ||' | '|| c.Symptom2 ||' | '|| c.Symptom3 ||' | '|| c.DOSAGE||'');

DBMS\_OUTPUT.NEW\_LINE;

end loop;

dbms\_output.put\_line('|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|');

end;

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

| Medicine | | Symptom2 | Symptom3 | Total |

| | Symptom1 | | | |

---------------------------------------------------------------------------------------------

| depressant | lost intrest | sleep problem | looking at death | 1

| Bevacizumab | skin become white | losing weight | feeling tired | 5ml

| depressant | fiver | losing weight | feeling tired | 10ml

| Abraxane | Fatigue | Skin changes | Weight changes | 5

| eupolio | new veriant | losing weight | feeling tired | 5ml

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

Statement processed.

**13. Write a trigger which does not allow to insert or update treatment table if AVG\_CURE\_TIME is less than 1.**

create or replace trigger avg\_rule

before insert or update on tbl\_treatment

for each row

begin

if :new.AVG\_CURE\_TIME<1 then

raise\_application\_error(-20001,'avg time can not be less than 1');

end if;

end;

**SET:-7**

**CUSTOMER (cno, cust\_name, cust\_phone, location,gender)**

create table tbl\_CUSTOMER1

(

cno int primary key,

cust\_name varchar2(20),

cust\_phone varchar2(20),

location varchar2(20),

gender varchar(6)

);

insert into tbl\_customer1 values(1,'mohit',9956987451,'surat','male');

insert into tbl\_customer1 values(2,'hiral',9945887451,'surat','female');

insert into tbl\_customer1 values(3,'minal',8569745632,'bardoli','female');

insert into tbl\_customer1 values(4,'jeet',7894512360,'madhi','male');

insert into tbl\_customer1 values(5,'meet',9874509813,'vyara','male');

**ITEM (itemno, itemname, color, weight, expire\_date, price, shop\_name)**

create table tbl\_ITEM1

(

itemno int primary key,

itemname varchar(25) constraint chk\_item\_name unique,

color varchar(25) NOT NULL,

weight int,

expire\_date date NOT NULL,

price int NOT NULL,

shop\_name varchar(30)

);

insert into tbl\_ITEM1 values(101,'refrigerator','black',50,'04-09-2021',50000,'dhiraj electronics');

insert into tbl\_ITEM1 values(40,'Air conditioner','white',10,'09-09-2021',60000,'gitanjali electronics');

insert into tbl\_ITEM1 values(140,'toaster','white',2,'06-10-2021',15000,'gitanjali electronics');

insert into tbl\_ITEM1 values(110,'grinder','brown',1,'04-10-2021',3000,'bhavana electronics');

insert into tbl\_ITEM1 values(105,'washing machine','white',5,'07-10-2021',10000,'bhavana electronics');

insert into tbl\_ITEM1 values(103,'oven','black',1,'04-30-2021',50000,'dhiraj electronics');

**CUST\_ITEM (cno, itemno, quantity\_purchased, date\_purchase)**

create table tbl\_CUST\_ITEM

(

cno int references tbl\_customer1(cno),

itemno int references tbl\_item1(itemno),

quantity\_purchased number(3),

date\_purchase date

);

insert into tbl\_CUST\_ITEM values(2,140,1,'03-27-2021');

insert into tbl\_CUST\_ITEM values(1,101,2,'02-24-2021');

insert into tbl\_CUST\_ITEM values(3,110,3,'01-04-2021');

insert into tbl\_CUST\_ITEM values(4,105,6,'01-24-2021');

insert into tbl\_CUST\_ITEM values(5,140,1,'01-28-2021');

**1. Delete the items whose price is more than 50000.**

delete from tbl\_item1 where price>50000

**2. Find the names of the customer who is located in same location as that of other customer.**

select cust\_name,LOCATION from tbl\_customer1 where location in(select location from tbl\_CUSTOMER1 group by location having count(\*) > 1)

|  |  |
| --- | --- |
| **CUST\_NAME** | **LOCATION** |
| mohit | surat |
| hiral | surat |

**3. Display the names of items which is black, white & brown in color.**

select ITEMNAME from tbl\_item1 where color='black' or color='brown' or color='white'

|  |
| --- |
| **ITEMNAME** |
| refrigerator |
| toaster |
| grinder |
| oven |
| washing machine |

**4. Display the names of all the items whose names lies between ‘p’ and‘s’.**

select itemname from tbl\_item1 where itemname between 'p' and 's'.

|  |
| --- |
| **ITEMNAME** |
| refrigerator |

**5. Find the item which is having less weight.**

select itemname from tbl\_item1 where weight in(select min(weight) from tbl\_item1)

|  |
| --- |
| **ITEMNAME** |
| grinder |
| oven |

**6. Add one month more to those items whose item no =40.**

update tbl\_item1 set expire\_date=add\_months(expire\_date,1) where itemno=40;

**7. Count total number of items which is going to expire in next month**

select count(itemno)"no\_of\_item\_expire\_nm" from tbl\_item1 where expire\_date<TRUNC( SYSDATE ) + INTERVAL '31' DAY and expire\_date >= SYSDATE;



**8. List all customers whose phone number starts with ‘99’.**

select cust\_name from tbl\_customer1 where CUST\_PHONE like '99%'

|  |
| --- |
| **CUST\_NAME** |
| mohit |
| hiral |

**9. Display total value (qty\*price) for all items.**

select sum(i.PRICE\*c.QUANTITY\_PURCHASED)"total value for all items" from tbl\_cust\_item c,tbl\_item1 i where c.itemno=i.itemno .

|  |
| --- |
| **total value for all items** |
| 199000 |

**10. List customer details who has purchased maximum number of items.**

select \* from tbl\_customer1 where cno=(select cno from tbl\_cust\_item where QUANTITY\_PURCHASED=(select max(QUANTITY\_PURCHASED) from tbl\_cust\_item));

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CNO** | **CUST\_NAME** | **CUST\_PHONE** | **LOCATION** | **GENDER** |
| 4 | jeet | 7894512360 | madhi | male |

**11. Display total price item wise.**

select ITEMNAME,PRICE from tbl\_item1 order by PRICE asc;

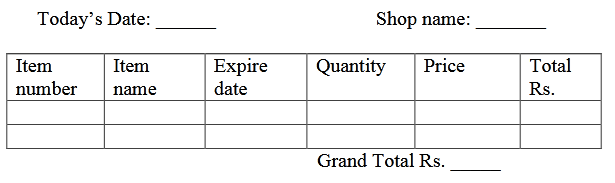
|  |  |
| --- | --- |
| **ITEMNAME** | **PRICE** |
| grinder | 3000 |
| washing machine | 10000 |
| toaster | 15000 |
| oven | 50000 |
| refrigerator | 50000 |

**12. List name of items, customer details and qty purchased.**

select ITEMNAME ,CUST\_NAME,CUST\_PHONE,LOCATION,GENDER,QUANTITY\_PURCHASED from tbl\_CUSTOMER1 c,tbl\_cust\_ITEM ci,tbl\_ITEM1 i where c.cno=ci.cno and i.itemno=ci.itemno;

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ITEMNAME** | **CUST\_NAME** | **CUST\_PHONE** | **LOCATION** | **GENDER** | **QUANTITY\_PURCHASED** |
| refrigerator | mohit | 9956987451 | surat | male | 2 |
| toaster | meet | 9874509813 | vyara | male | 1 |
| toaster | hiral | 9945887451 | surat | female | 1 |
| grinder | minal | 8569745632 | bardoli | female | 3 |
| washing machine | jeet | 7894512360 | madhi | male | 6 |

**13. Write a PL/SQL procedure which will display records in the following format.**

****

create or replace procedure disp\_rec

is

ino int;

inm varchar(30);

exd date;

qitem int;

price number(5);

begin

dbms\_output.put\_line('Today’s Date: '||sysdate||' '||'Shop name: \_\_13\_\_');

dbms\_output.put\_line('\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_');

dbms\_output.put\_line('|Item number | Item name | Expire date | Quantity | Price | Total Rs.|');

dbms\_output.put\_line('------------------------------------------------------------------------------------');

for c in (select i.ITEMNO,i.ITEMNAME,i.EXPIRE\_DATE,ci.QUANTITY\_PURCHASED,i.PRICE,(ci.QUANTITY\_PURCHASED\*i.PRICE)"Total Rs" from tbl\_item1 i,tbl\_cust\_item ci where i.itemno=ci.itemno)

loop

ino :=c.ITEMNO;

inm :=c.ITEMNAME;

exd :=c.EXPIRE\_DATE;

qitem :=c.QUANTITY\_PURCHASED;

price :=c.PRICE;

dbms\_output.put\_line('| '||ino||' | '||inm||' | '||exd||' | '||qitem||' | '||price||' | '||c.QUANTITY\_PURCHASED\*c.PRICE ||' |');

end loop;

dbms\_output.put\_line('|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|');

dbms\_output.put\_line(' '||'Grand Total Rs. \_\_\_\_\_');

end;

**// Call the procedure**

begin

disp\_rec;

end;

Today’s Date: 01/14/2022 Shop name: \_\_13\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|Item number | Item name | Expire date | Quantity | Price | Total Rs.|

------------------------------------------------------------------------------------

| 140 | toaster | 07/10/2021 | 1 | 15000 | 15000 |

| 110 | grinder | 04/10/2021 | 3 | 3000 | 9000 |

| 140 | toaster | 07/10/2021 | 1 | 15000 | 15000 |

| 101 | refriger | 04/09/2021 | 2 | 50000 | 100000 |

| 105 | wmachine | 07/10/2021 | 6 | 10000 | 60000 |

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

Grand Total Rs. \_\_\_\_\_

Statement processed.

**14. Write a trigger which do not allow insertion / updation / deletion of Item details on Sunday.**

create or replace trigger detail\_sun

before insert or update or delete

on tbl\_item1

for each row

begin

IF to\_char(sysdate,'D') = 1 then

raise\_application\_error(-20000,'can not perform insert/update/delete opretion on sunday ');

END IF;

end;

**SET:-15**

**EMP (empno, empnm, empadd, salary, date\_birth, joindt, deptno)**

create table tbl\_EMP

(

empno int primary key,

empnm varchar2(10),

empadd varchar2(25),

salary number(5),

date\_birth date,

joindt date,

deptno int references tbl\_dept(deptno)

);

insert into tbl\_dept values(1,'development');

insert into tbl\_dept values(2,'software');

insert into tbl\_dept values(3,'desing');

insert into tbl\_dept values(4,'testing');

insert into tbl\_dept values(5,'coding');

**DEPT (deptno, deptnm)**

create table tbl\_dept

(

deptno int primary key,

deptnm varchar2(20)

);

insert into emp values(1,'keyur','bardoli','5000','09/26/1999','01/01/2015',5);

insert into emp values(6,'yogesh','vyara','2500','02/09/1998','06/11/2015',5);

insert into emp values(2,'yogita','vankaner','4000','06/09/1995','05/02/2014',4);

insert into emp values(3,'mayuri','surat','2000','02/09/1993','02/02/2014',4);

insert into emp values(4,'jayesh','bhuj','1000','09/21/1994','10/05/2016',1);

insert into emp values(5,'jugal','palsana','2000','11/09/1995','11/01/2020',2);

insert into emp values(7,'parth','ten','2500','10/20/1995','12/11/2020',4);

**Write a PL/SQL block (table above EMP-DEPT table) which takes as input Department name and displays all the employees of this department who has been working since last five years**

create or replace function disp\_emp(s in varchar)

return varchar is emp\_nm varchar(50);

begin

select e.EMPNM"Employee" into emp\_nm from emp e,tbl\_dept d where d.deptnm=(select deptnm from tbl\_dept where deptnm=s and d.deptno=e.deptno) and e.joindt=any (select joindt from emp where to\_char(joindt,'yyyy') between '2015' and to\_char(sysdate,'yyyy'));

return emp\_nm;

end;

**// Call the function**

declare

ename varchar(50);

s varchar(20);

begin

s :='development';

ename := disp\_emp(s); ​

​dbms\_output.put\_line(ename);

end;

jayesh

Statement processed.

**SET:-20**

**1. Find out the names of all the tables, views and constraints associated with current tables in the system.**

SELECT u.TABLE\_NAME,c.CONSTRAINT\_NAME,d.NAME FROM user\_tables u,user\_constraints c,all\_dependencies d WHERE d.TYPE = 'VIEW' AND d.referenced\_type = 'TABLE';

|  |  |  |
| --- | --- | --- |
| **TABLE\_NAME** | **CONSTRAINT\_NAME** | **NAME** |
| EMP | SYS\_C007306 | USER\_ADVISOR\_ACTIONS |
| EMP | SYS\_C007305 | USER\_ADVISOR\_ACTIONS |
| EMP | SYS\_C007304 | USER\_ADVISOR\_ACTIONS |
| EMP | SYS\_C007301 | USER\_ADVISOR\_ACTIONS |
| EMP | BIN$yG+mC75YQ2CA4BmlcUUPbA==$0 | USER\_ADVISOR\_ACTIONS |
| EMP | BIN$z50iJvU2QY2iU/DvtvbXrg==$0 | USER\_ADVISOR\_ACTIONS |
| EMP | SYS\_C007303 | USER\_ADVISOR\_ACTIONS |
| EMP | SYS\_C007302 | USER\_ADVISOR\_ACTIONS |
| EMP | BIN$deq65wtjTVmoUtIcejokYQ==$0 | USER\_ADVISOR\_ACTIONS |
| EMP | SYS\_C007297 | USER\_ADVISOR\_ACTIONS |
| More than 10 rows available. Increase rows selector to view more rows. | | |

**2. Write a query to add 15 days to the current date.**

select current\_date+10 from dual

|  |
| --- |
| **CURRENT\_DATE+10** |
| 01/23/2022 |

**3. Write a query to Add and subtract 5 months from the current month.**

select add\_months(sysdate,5)"Add 5 months" from dual

|  |
| --- |
| **add 5 months** |
| 06/13/2022 |

select add\_months(sysdate,-5)"substract 5 months" from dual

|  |
| --- |
| **substract 5 months** |
| 06/13/2022 |

**4. Find out the ASCII equivalent of character ‘M’.**

select ASCII('M') from dual;

|  |
| --- |
| **ASCII('M')** |
| 77 |

**5. Find out the character equivalent of ASCII 67, 65 and 84.**

select chr(67),chr(65),chr(84) from dual;

|  |  |  |
| --- | --- | --- |
| **CHR(67)** | **CHR(65)** | **CHR(84)** |
| C | A | T |

**6. Write a query to find the last day of the month.**

select last\_day(sysdate) from dual;

|  |
| --- |
| **LAST\_DAY(SYSDATE)** |
| 01/31/2022 |

**7. Find out how many days are left in the current month.**

Select last\_day(sysdate) - sysdate from dual;

|  |
| --- |
| **LAST\_DAY(SYSDATE)-SYSDATE** |
| 17 |

**8. Write a query to calculate the Date difference between current date and 20/05/2015.**

select sysdate - TO\_DATE('20/05/2015', 'dd-mm-yyyy')"Date difference" from dual;

|  |
| --- |
| **Date difference** |
| 2431.45631944444444444444444444444444444 |

**9. Write a query to Calculate the number of months between current date and 03/03/2016.**

select months\_between(current\_date , TO\_DATE('03/03/2016', 'dd-mm-yyyy')) "number of months between" from dual;

|  |
| --- |
| **number of months between** |
| 70.3697046744324970131421744324970131422 |

**10. Find out the second occurrence of ‘or’ from third position in the string ‘corporate floor’.**

Select instr('corporate floor','or', 3, 2)"instring" from dual;

|  |
| --- |
| **Instring** |
| 14 |

**11. Find out log to the base 3 of 81.**

select log(3,81)"log to the base 3 of 81" from dual;

|  |
| --- |
| **log to the base 3 of 81** |
| 3.99999999999999999999999999999999999999 |

**12. Convert the string ‘gujarat technological university’ so that first character of each work is in capital.**

select initcap('gujarat technological university')"First Character Capital" from dual;

|  |
| --- |
| **First Character Capital** |
| Gujarat Technological University |

**13. Convert the string ‘jack and jue’ Into ‘black and blue’.**

select replace('jack and jue','j','bl')"change" from dual;

|  |
| --- |
| **change** |
| black and blue |

**14. Round off the date 27-July-2016 to the current year.**

select round(to\_date('july-27-2016'),'year')"Round off 27-July-2016" from dual;

|  |
| --- |
| **Round off 27-July-2016** |
| 01/01/2017 |

**15. Find out the user name and user id off currently logged on user.**

select user,uid from dual;

|  |  |
| --- | --- |
| **USER** | **UID** |
| ANONYMOUS | 35 |