FYBBACA Semester II RDBMS

Client (client_no, client_name, address, birthdate)
Policy_info (policy_no, desc, maturity_amt, prem_amt, date)
Relation between Client and Policy_info is Many to Many
Constraint: Primary key, prem_amt and maturity_amt should be > 0.

1)Write a function which will return total maturity amount of policies of a particular client.

```
SQL> create table client1(Cno int primary key, Cname varchar(15), Address
varchar(20),birthdate varchar(10));
SQL> create table poly(pno int primary key,decb varchar(10),mamt int check(mamt>0),pamt
int check(pamt>0),pdate varchar(15));
SQL> create table cp(Cno int,pno int);

SQL> insert into client1  values(1,'shree','pune','23jan');
SQL> insert into poly values(1,'L-term',1000,500,'23jan');
SQL> insert into cp values(1,1);

SQL> set serveroutput on
SQL> create or replace function f1(abc in varchar) return number as xyz number;
  2  begin
  3 select sum(poly.mamt)into xyz from client1 ,poly,cp where client1.Cno=cp.Cno and
poly.pno=cp.pno   and cname='shree';
  4  if sql% found then
  5  return(xyz);
  6  else
  7  return null;
  8  end if;
  9  end f1;
 10  /

Function created.
SQL> begin
  2  dbms_output.put_line('amt-'||f1('shree'));
  3  end;
  4  /
amt-1000
```

2)Write a cursor which will display policy date wise client details.

```
SQL>  set serveroutput on
SQL>  declare
  2   cursor c1 is select  cname, address,pdate from client,poly,cp where client.cno=cp.cno
and   poly.pno=cp.pno order by pdate;
  3   c c1%rowtype;
```

```
 4  begin
 5  open c1;
 6  loop
 7  fetch c1 into c;
 8  exit when c1%notfound;
 9  dbms_output.put_line(c.cname||''||c.address||''||c.pdate);
10   end loop;
11   close c1;
12   end;
13  /
shreepune23jan
ommumbai22feb
sairaichur21march

PL/SQL procedure successfully completed.
```

Slip 2

Item (itemno, itemname)
Supplier (supplier_No , supplier_name, address, city)
Relationship between Item and Supplier is many-to-many with descriptive attribute rate and quantity
Constraints: itemno ,supplier_No primary key

```
SQL>create table item(ino int primary key,iname varchar(11));
SQL>insert into item values(1,'soap');

SQL>create table supplier(sno int primary key,sname varchar(11),address varchar(11),city varchar(11));
SQL>insert into supplier  values(101,'ram',’loni’,’pune’);

SQL>create table i_s(ino int,sno int,rate int,quantity int);
SQL>insert into i_s values(1,101,250,3);
```

1)Write function to print the total number of suppliers of a particular item

```
 set serveroutput on
create or replace function f1(abc in varchar) return number as xyz number;
begin
select sum(supplier.sno) into xyz from item,supplier,i_s where item.ino=i_s.ino and supplier.sno=i_s.sno and iname='soap';
if sql %found then
return (xyz);
else
return null;
```

```
end if;
end f1;
/
 begin
dbms_output.put_line (‘item’||f1(‘soap’));
end;
/
```

2)Write a trigger which will fire before insert or update on rate and quantity less than or equal to zero. (Raise user defined exception and give appropriate message)

```
SQL> set serveroutput on
SQL> create or replace trigger t1 before insert or update on i_s
  2  for each row
  3  begin
  4  if(:new.quantity<=0)then
  5  raise_application_error(-20001,’quantity >0');
  6  end if;
  7  end;
```

Slip 3

Consider the following entities and their relationship.

Newspaper (name,language , publisher , cost)

Cities (pincode , city, state)

Relationship between Newspaper and Cities is many-to-many with descriptive attribute daily required

Constraints: name and pincode primary key

```
SQL> create table newspaper(nno int,name varchar(15) primary key,language
varchar(10),publisher  varchar(10),cost int);
SQL>  insert into newspaper values(1,'punetimes','marathi','abc',5);

SQL> create table citys(cno int primary key,city varchar(10),state varchar(15));
SQL> insert into citys values(1,'pune','mh');

SQL> create table nc(nno int,cno int,daily_required varchar(10));
SQL> insert into nc values(1,1,'yes');
```

1)Write a trigger which will fire before insert on the cities table which check that the pincode must be of 6 digit. (Raise user defined exception and give appropriate message).

```
SQL> set serveroutput on
SQL> create or replace trigger t1 before insert or update on nc
  2  for each row
  3  begin
  4  if(:new.pincode=6)then
  5  raise_application_error(-20001,'Insert Invalid Record');
  6  end if;
  7  end;
  8  /
```

2)Write a procedure to calculate city wise total cost of each newspaper

```
SQL> set serveroutput on
SQL>  create or replace procedure p6(t in varchar)as cursor c2 is select city,cost  from
newspaper,c
```

```
itys,nc where cost=(select sum(cost)from newspaper) and newspaper.nno=nc.nno and
citys.cno=nc.cno;
  2         c c2 %rowtype;
  3          begin
  4          open c2;
  5          dbms_output.put_line('city'||''||'cost');
  6          loop
  7          fetch c2 into c;
  8          exit when c2 %notfound;
  9         if(c.city=t) then
 10        dbms_output.put_line(c.city||''||c.cost);
 11        end if;
 12        end loop;
 13        close c2;
 14        end;
 15  /

Procedure created.

SQL> begin
  2  p6('pune');
  3  end;
  4  /
citycost
pune5

PL/SQL procedure successfully completed.


Slip 3-


SQL> set serveroutput on
SQL>  create or replace procedure p5(n in varchar) as sum_cost newspaper.cost %type;
  2     begin
  3     select sum(cost) into sum_cost from newspaper,citys,nc where newspaper.nno=nc.nno
and citys.
cno=nc.cno;
  4    if(sum_cost > 0) then
  5      dbms_output.put_line('sum cost='||sum_cost);
  6     else
  7     dbms_output.put_line('cost cannot be calculated');
  8     end if;
  9      end p5;
```

```
10 /
```

Procedure created.

```
SQL> execute p5('5');
sum cost=15
```

PL/SQL procedure successfully completed.
Slip 4

Consider the following entities and their relationships.
Client(client_no, client_name, address, birthdate)
Policy_info (policy_no, desc, maturity_amt, prem_amt, date)
Relation between Client and Policy_info is Many to Many
Constraint: Primary key, prem_amt and maturity_amt should be > 0.

```
SQL> create table client(cno int primary key,cname varchar(10),addr varchar(15),bdate
varchar(15));
SQL> insert into client values(1,'ajay','pune','01-04-200');
```

```
SQL> create table policy(pno int primary key,disc varchar(10),mamt int,pamt int,pdate
varchar(15));
SQL> insert into policy values(1,'life','10000','2000','10-5-2003');
```

```
SQL> create table cp(cno int,pno int);
SQL> insert into cp values(1,1);
```

1)Write a procedure which will display all policy details having premium amount less than 5000.

```
SQL> set serveroutput on
SQL> create or replace procedure p4(n in varchar)as cursor c4 is select pamt,pdate from
client,polic
y,cp where client.cno=cp.cno and policy.pno=cp.pno and pamt< 5000;
  2    c c4 %rowtype;
  3     begin
  4     open c4;
  5    dbms_output.put_line('pamt'||''||'pdate');
  6    loop
  7   fetch c4 into c;
  8    exit when c4 %notfound;
  9    if(c.pamt=n) then
```

```
 10    dbms_output.put_line(c.pamt||''||c.pdate);
 11    end if;
 12     end loop;
 13     close c4;
 14    end;
 15  /
```

Procedure created.

```
SQL> begin
  2  p4('2000');
  3  end;
  4  /
pamtpdate
200010-5-2003
```

2)Write a trigger which will fire before insert or update on policy_info having maturity amount less than premium amount. (Raise user defined exception and give appropriate message)

```
SQL> set serveroutput on
SQL> create or replace trigger t1 before insert or update on cp
  2  for each row
  3  begin
  4  if(:new.mamt<:new.pamt)then
  5  raise_application_error(-20001,'mamt>pamt');
  6  end if;
  7  end;
  8  /
```

Slip 5

Consider the following entities and their relationships.
Library(Lno, Lname, Location, Librarian, no_of_books)
Book(Bid, Bname, Author_Name, Price, publication)
Relation between Library and Book is one to many. Constraint: Primary key, Price should not be null.
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

```
SQL> create table library(l_no int primary key,l_name varchar(20),location
varchar(20),librarian varchar(20),no_of_book int);
SQL> create table books(b_id int primary key,b_name varchar(20),author_name
varchar(20),price int,publication varchar(20),l_no int);
SQL> insert into library values(1,'francis','pune','riya','10');
```

```
SQL> insert into books values(1,'wonderland','alice','500','nirali',1);
```

1)Write a function which will accept publication name from user and display total price of books of that publication.

```
SQL> set serveroutput on;
SQL> create or replace function fun1(pn in varchar) return number as pm number;
  2  begin
  3  select sum(books.price) into pm from library,books where library.l_no=books.l_no and
publication=’vision’;
  4  if sql %found then
  5  return(pm);
  6  else
  7  return null;
  8  end if;
  9  end;
 10  /
Function created.
SQL> begin
  2  dbms_output.put_line('price-'||fun1('vision'));
  3  end;
  4  /
```

2)Write a cursor which will display library wise book details.(Use Parameterized Cursor)

```
SQL> set serveroutput on
SQL> declare
  2    cursor c1(yyyy  Library.l_name %type)is select l_name,b_name from
Library,Book  where Library.l_no= Book.l_no order by l_name;
  3    c c1%rowtype;
  4    begin
  5    open c1('&l_name ');
  6    loop
  7    fetch c1 into c;
  8    exit when c1%notfound;
  9    dbms_output.put_line(c.l_name||"||c.b_name);
 10   end loop;
 11    close c1;
 12    end;
 13
 14  /
```

Slip 6

Consider the following entities and their relationships.

Employee (emp_id, emp_name, address)

Investment (inv_no, inv_name, inv_date, inv_amount)

Relation between Employee and Investment is One to Many.

Constraint: Primary key, inv_amount should be > 0.

SQL>create table employee(eid int primary key,ename varchar(10),address varchar(10));
SQL>create table investment(inv_no int primary key, inv_name varchar(10),inv_date varchar(10),inv_amount int,eid int);

SQL>insert intoemployee values(1,'reshma','koregoan');
SQL>insert into investment values(1,'house','15thaug','50000',1);

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1)Write a procedure which will display details of employees invested amount in “Mutual Fund”

```
SQL>  set serveroutput on;
SQL> create or replace procedure p1(n in varchar) as cursor c1 is select e_name,inv_amount from employee,investment where employee.e_id=investment.e_id and inv_amount=50000;
  2  c c1 %rowtype;
  3  begin
  4  open c1;
  5  dbms_output.put_line('e_name'||''||'inv_amount');
  6  loop
  7  fetch c1 into c;
  8  exit when c1 %notfound;
  9  if(c.inv_amount=n) then
 10  dbms_output.put_line(c.e_name||''||c.inv_amount);
 11  end if;
 12  end loop;
 13  close c1;
 14  end;
 15  /
Procedure created.
SQL> begin
  2  p1('50000');
  3  end;
  4  /
```

e_nameinv_amount
reshma50000

2)Write a cursor which will display date wise investment details.

```
SQL> set  serveroutput on;
SQL> declare
  2  cursor c1 is select inv_date,inv_no,inv_name,inv_amount from employee,investment
where employee.e_id=investment.e_id;
  3  c c1 %rowtype;
  4  begin
  5  open c1;
  6  loop
  7  fetch c1 into c;
  8  exit when c1 %notfound;
  9  dbms_output.put_line(c.inv_date||''||c.inv_no||''||c.inv_name||''||c.inv_amount);
 10  end loop;
 11  close c1;
 12  end;
 13  /
```

15thaug1house50000
20thsept2land60000
25thoct3vehicle70000
Slip 7

Consider the following entities and their relationships.
Bill (billno, day, tableno, total)
Menu (dish_no, dish_desc, price)
The relationship between Bill and Menu is Many to Many with quantity as descriptive attribute.
Constraint: Primary key, price should be > 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

```
SQL>create table bill(bill_no int primary key,day varchar(10),table_no int,total int);
SQL>create table menu(dish_no int primary key,dish_description varchar(10),price int);
SQL>create table bm(bill_no int,dish_no int);

SQL>insert into bill values( 1,'monday','101','240');
SQL>insert into menu values(1,'paneer','200');
SQL>insert into bm values(1,1);
```

1)Write a procedure to display menu details having price between 200 to 500 which were order on ‘Saturday’ .

```
SQL> set serveroutput on;
SQL> create or replace procedure p1(a in varchar) as cursor c1 is select
menu.dish_no,menu.price,bil
l.day from bill,menu,bm where bill.bill_no=bm.bill_no and menu.dish_no=bm.dish_no and
price between
200 and 500 and day='saturday';
  2   c c1 %rowtype;
  3    begin
  4   open c1;
  5   dbms_output.put_line('dish_no'||''||'price'||''||'day');
  6   loop
  7   fetch c1 into c;
  8   exit when c1 %notfound;
  9   if(c.day=a)then
 10  dbms_output.put_line(c.dish_no||''||c.price||''||c.day);
 11   end if;
 12   end loop;
 13   close c1;
 14   end;
 15  /

Procedure created.

SQL> begin
  2  p1('saturday');
  3  end;
  4  /
dish_nopriceday
3400saturday
```

2)Write a trigger which will fire before insert or update on Menu having price less than or equal to zero. (Raise user defined exception and give appropriate message)

```
SQL> set serveroutput on;
SQL> create or replace trigger t1 before insert or update on menu
  2  for each row
  3  begin
  4  if(:new.price<=0)then
  5  raise_application_error(-20001,'price>0');
  6  end if;
  7  end;
  8  /
```

```
Trigger created
SQL>  insert into menu values(6,'rice',0);
 insert into menu values(6,'rice',0)
            *
ERROR at line 1:
ORA-20001: price>0
ORA-06512: at "SCOTT.T1", line 3
ORA-04088: error during execution of trigger 'SCOTT.T1'
```

Slip 8

Consider the following entities and their relationships.
Plan (plan_no, plan_name, nooffreecalls, freecalltime, fix_amt)
Customer (cust_no, cust_name, mobile_no)
Relation between Plan and Customer is One to Many. Constraint: Primary key, fix_amt should be greater than 0.

```
SQL>Create table plan(pno int primary key,pname varchar(15),nc varchar(15), fct
varchar(15),f_amt varchar(15));
SQL>Insert into plan values(1,'summer','10','10min','500');
SQL>Create table cust(cno int primary key,cname varchar(15),mno int,pno int);
SQL>Insert into cust values(1,'swarup',9763162617,1);
```

1)Write a function which will accept plan number from user and display all the details of the selected plan

```
SQL>set serveroutput on
SQL>create or replace function fun1(nocomp in varchar)return varchar as detalis
varchar(10);
  2 begin
  3 select ( plan.pname)into detalis from plan,cust where plan.pno=cust.pno and plan.pno='1';
  4 if sql %found then
  5 return(detalis);
  6 else
  7 return null;
  8 end if;
  9 end fun1;
 10  /
Function created.


SQL>begin
  2 dbms_output.put_line('detalis-'||fun1('1'));
  3 end;
```

4 /

2)Write a cursor which will display customer wise plan details.(Use Parameterized Cursor)

```
SQL> set serveroutput on
SQL> declare
  2    cursor c1(yyyy  cust.cname %type)is select cname,pname from plan,cust  where
plan.pno=cust.pno order by cname;
  3    c c1%rowtype;
  4    begin
  5    open c1('&cname ');
  6    loop
  7    fetch c1 into c;
  8    exit when c1%notfound;
  9    dbms_output.put_line(c.cname||''||c.pname);
 10   end loop;
 11    close c1;
 12    end;
 13
 14  /
Enter value for cname: anita;
old   5:    open c1('&cname ');
new   5:    open c1('anita; ');
anitadiwali
manoharwinter
swarupsummer
```

Slip9

Consider the following entities and their relationships.
Project (pno, pname, start_date, budget, status)
Department (dno, dname, HOD, loc)
The relationship between Project and Department is Many to One.
Constraint: Primary key.
Project Status Constraints:C – Completed,P - Progressive, I – Incomplete
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

SQL> create table department(dno int primary key,dname varchar(20),HOD varchar(20),loc varchar(20));

SQL> create table project(pno int primary key,pname varchar(20),s_date varchar(25),budget varchar(15),status varchar(10),dno int);

SQL> insert into department values(1,'computer','amit','pune');

SQL> insert into project values(101,'java','10-2-2015','10,000','P',1);

1)Write a function which accept department name and display total number of projects whose status is “p”(progressive).

```
SQL> set serveroutput on
SQL> create or replace function f1(xyz in varchar)return number as abc number;
  2  begin
  3  select count(project.pno)into abc from department,project where
department.dno=project.dno and department.dname='computer' and project.status='P';
  4  if sql %found then
  5  return(abc);
  6  else
  7  return null;
  8  end if;
  9  end f1;
 10  /
```

Function created.

```
SQL> begin
  2  dbms_output.put_line('project-'||f1('computer'));
  3  end;
  4  /
project-3
```

PL/SQL procedure successfully completed.

2)Write a cursor which will display status wise project details of each department.

```
SQL>  set serveroutput on
SQL>  declare
  2   cursor c1 is select  cname, address,pdate from client,poly,cp where client.cno=cp.cno
and   poly.pno=cp.pno order by pdate;
  3   c c1%rowtype;
  4    begin
  5    open c1;
  6    loop
  7    fetch c1 into c;
  8    exit when c1%notfound;
  9    dbms_output.put_line(c.cname||''||c.address||''||c.pdate);
```

```
 10    end loop;
 11    close c1;
 12    end;
 13  /
```

Slip 10

Consider the following entities and their relationships.
Gym (Name, city, charges, scheme)
Member (ID, Name, phoneNo, address)
Relation between Gym and member is one to many. Constraint: Primary Key, charges must be greater than 0.
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

SQL> create table gym(gno int primary key,gname varchar(20),city varchar(20),charges int,scheme varchar(20));

SQL> create table member(mid int primary key,mname varchar(20),phone int,addr varchar(20),gno int);

SQL> insert into gym values(101,'aaa','pune',1000,'xyz');

SQL> insert into member values(001,'mmm',1122334455,'goa',101);

1)Write a function which will accept member id and scheme from user and display charges paid by that member.

```
SQL>  set serveroutput on
SQL> create or replace function f3(abc in varchar) return number as xyz number;
  2   begin
  3  select gym.charges into xyz from gym,member where gym.gno=member.gno and
mid='2';
  4   if sql %found then
  5  return(xyz);
  6   else
  7  return null;
  8  end if;
  9  end f3;
 10   /
```

Function created.

```
SQL> begin
  2  dbms_output.put_line('gym-'||f3 ('2'));
  3  end;
  4  /
gym-2000
```

PL/SQL procedure successfully completed.

2)Write a trigger which will fire before insert or update on Gym having charges less than 1000. (Raise user defined exception and give appropriate message)

```
SQL> set serveroutput on
SQL> create or replace trigger t1 before insert or update on gym
  2  for each row
  3  begin
  4  if(:new.charges<=1000)then
  5  raise_application_error(-20001,'charges>1000');
  6  end if;
  7  end;
  8  /
```

Trigger created

```
SQL> insert into gym values(104,'ddd','pune',-1000,'mmm');
insert into gym values(104,'ddd','pune',-1000,'mmm')
            *
ERROR at line 1:
ORA-20001: charges>0
ORA-06512: at "SCOTT.T1", line 3
ORA-04088: error during execution of trigger 'SCOTT.T1'.
```

Slip 11

Consider the following entities and their relationships.

Student (rollno, sname, class, timetable)

Lab (LabNo, LabName, capacity, equipment)

Relation between Student and Lab is Many to One. Constraint: Primary Key, capacity should not be null.

```
SQL>create table lab(labno int primary key,labname varchar(11),capacity int,equipment
varchar(20));
```

SQL>insert into lab values(1,’computer’,100,’scope’);

SQL>create table student10(rollno int primary key,sname varchar(20),class varchar(20),timetable varchar(20),labno int);

SQL>insert into student10 values(102,'raj','sy','monday',2);

1)Write a function which will accept Lab number from user and display total number of student allocated in that lab.

```
set serveroutput on
create or replace function f2(abc in varchar) return number as xyz number;
begin
select count(student10.rollno) into xyz from student10,lab where lab.labno=student10.labno
and lab.labno=1;
if sql %found then
return (xyz);
else
return null;
end if;
end f2;
/

begin
dbms_output.put_line ('no of student'||f2(‘1’));
end;
/
```

2)Write a cursor which will display lab wise student details.

```
SQL>  set serveroutput on
SQL>  declare
  2   cursor c1 is
select  labname , sname , class from lab, student10  where lab.labno=student10.labno order
by labname ;
  3   c c1%rowtype;
  4    begin
  5    open c1;
  6    loop
  7    fetch c1 into c;
  8    exit when c1%notfound;
  9    dbms_output.put_line(c. labname  ||"||c. sname  ||"||c. class);
 10    end loop;
 11    close c1;
```

```
 12    end;
 13  /
```

Slip 12

Consider the following entities and their relationships.
Wholesaler (w_no, w_name, address, city)
Product (product_no, product_name, rate)
Relation between Wholesaler and Product is Many to Many with quantity as descriptive attribute.
Constraint: Primary key, rate should be > 0.
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1)Write a function which will accept wholesaler name from user and will display total number of items supplied by him.

```
SQL> set serveroutput on;
SQL> create or replace function fun1(pn in varchar) return number as pm number;
  2  begin
  3  select sum(ws_product.no_of_item) into pm from ws,product,ws_product where
ws.wno=ws_product.wno and product.pno=ws_product.pno and ws.wname='riya';
  4  if sql %found then
  5  return(pm);
  6  else
  7  return null;
  8  end if;
  9  end;
 10  /
Function created.

SQL> begin
  2  dbms_output.put_line('no_of_item-'||fun1('riya'));
  3  end;
  4  /

no_of_item-5

PL/SQL procedure successfully completed.
```

2)Write a trigger which will fire before insert or update on product having rate less than or equal to zero (Raise user defined exception and give appropriate message)

```
SQL> set serveroutput on
SQL> create or replace trigger t1 before insert or update on product
  2  for each row
  3  begin
  4  if(:new.rate<=0)then
  5  raise_application_error(-20001,'rate>0');
  6  end if;
  7  end;
  8  /
```

Slip 13

Consider the following entities and their relationships.
Country (CId, CName , no_of_states, area, location, population)
Citizen(Id, Name, mother_toung, state_name)
Relation between Country and Citizen is one to many. Constraint: Primary key, area should not be null.

```
SQL>Create table country13(cid int primary key,cname varchar(10),no_of_states
varchar(10),area varchar(10),location varchar(10),population varchar(10));
SQL>insert into country13 values(1,'5','mj','ny','20,000');
SQL>Create table citizen13(id int primary key,name varchar(10),mother_tounge
varchar(10),state_name  varchar(10),cid int);
SQL>insert into citizen13 values(1,'amit','hindi','goa',1);
```

1)Write a function which will display name of the country having minimum population.

```
SQL>set serveroutput on
SQL>create or replace function f1(dn in varchar)return varchar as dmn varchar(10);
  2 begin
  3 select(country13.cname)into dmn from country13 where population=(select
min(population)from country13);
  4 if sql %found then
  5 return (dmn);
  6 else
  7 return null;
  8 end if;
  9 end f1;
 10  /

Function created.
SQL>begin
  2 dbms_output.put_line('name-'||f1('cname'));
  3 end;
```

```
 4 /
```

2)Write a cursor which will display county wise citizen details.

```
SQL>  set serveroutput on
SQL>  declare
  2   cursor c1 is select  name, state_name   from country13, citizen13 where  country13.cid=
citizen13.cid order by cname;
  3   c c1%rowtype;
  4    begin
  5    open c1;
  6    loop
  7    fetch c1 into c;
  8    exit when c1%notfound;
  9    dbms_output.put_line(c. name ||''||c.state_name);
 10    end loop;
 11    close c1;
 12    end;
 13  /
```

Slip 14

College (code, college_name, address)
Teacher (teacher_id, teacher_name, Qualification, specialization, salary, Desg)
Relation between Teacher and College is Many to One. Constraint: Primary Key, qualification should not be null.

```
SQL> create table teacher2(tid int primary key,tname varchar(20),
qualification  varchar(20),specialization varchar(20),salary int,desg varchar(20));
SQL> insert into teacher2 values(100,'aaa','m.bba','english',15000,'head_of_department');
SQL> create table college20(cid int primary key,cname varchar(20),addr varchar(20),tid int);
SQL> insert into college20 values(1,'mmm','pune',100);
```

1)Write a procedure which will accept teacher name from user and display his/her college details.

```
SQL> set serveroutput on
SQL> create or replace procedure p1(n in varchar) as cursor c1 is  select tname,cname from
college20,teacher2 where college20.tid=teacher2.tid and tname='aaa';
  2  c c1 %rowtype;
  3  begin
  4  open c1;
  5  dbms_output.put_line('tname'||''||'cname');
  6   loop
  7   fetch c1 into c;
```

```
  8  exit when c1 %notfound;
  9   if(c.tname=n)then
 10  dbms_output.put_line(c.tname ||''||c.cname);
 11   end if;
 12   end loop;
 13   close c1;
 14    end;
 15  /
Procedure created.
SQL> begin
  2  p1('aaa');
  3  end;
  4  /
tnamecname
aaammm
```

2)Write a trigger which will fire before insert or update on Teacher having salary less than or equal to zero (Raise user defined exception and give appropriate message)

```
SQL>  set serveroutput on
SQL>  create or replace trigger t4 before insert or update on teacher2
  2   for each row
  3   begin
  4   if(:new.salary<=0)then
  5   raise_application_error(-20001,'salary>0');
  6   end if;
  7   end;
  8   /

Trigger created.

SQL> insert into teacher2 values(400,'vvv','m.ca','marathi',-20000,'teacher');
insert into teacher2 values(400,'vvv','m.ca','marathi',-20000,'teacher')
            *
ERROR at line 1:
ORA-20001: salary>0
ORA-06512: at "SCOTT.T4", line 3

ORA-04088: error during execution of trigger 'SCOTT.T4'
```

Slip 15

Consider the following entities and their relationships.

Driver(driver_id, driver_name, address)
Car(license_no, model, year)
Relation between Driver and Car is Many to Many with date and time as descriptive attribute.
Constraint: Primary key, driver_name should not be null.
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

```
SQL> create table driver(did int primary key,dname varchar(15),address varchar(20));

SQL> create table car(lno int primary key,model  varchar(20),year int);

SQL> create table dc(did int,lno int,t_date varchar(15),time varchar(10));

SQL> insert into driver values(1,'sonu','pune');

SQL> insert into car values(101,'swift','2000');

SQL> insert into dc values(1,101,'15-2-2000','9am');
```

1)Write a function which will display the total number of person who are using “Swift” car

```
SQL> set serveroutput on
SQL> create or replace function fun2(bcd in varchar)return number as efg number;
  2  begin
  3  select sum(driver.did)into efg from driver,car,dc where driver.did=dc.did and
car.lno=dc.lno and car.model='swift';
  4  if sql %found then
  5  return (efg);
  6  else
  7  return null;
  8  end if;
  9  end fun2;
 10  /

Function created.
SQL> begin
  2  dbms_output.put_line('person-'||fun2('swift'));
  3  end;
  4  /
person-8

PL/SQL procedure successfully completed.
```

2)Write a trigger which will fire before insert or update on year. If year value is more than current year. (Raise user defined exception and give appropriate message)

```
SQL> set serveroutput on
SQL> create or replace trigger t1 before insert or update on car
  2  for each row
  3  declare
  4  d1 varchar(15);
  5  d2 varchar(15);
  6  begin
  7  d1:=to_char(:new. t_date,'dd-mm-yyyy');
  8  d2:=to_char(sysdate,'dd-mm-yyyy');
  9  if(d1>d2) then
 10  raise_application_error(-20001,'year value should be less than current year.');
 11  end if;
 12  end;
 13  /
```

Slip 16

Consider the following entities and their relationships.
Game (game_name, no_of_players, coach_name)
Player (pid, pname, address, club_name)

Relation between Game and Player is Many to Many. Constraint: Primary key, no_of_players should be > 0.

```
SQL> create table game2(gid int primary key,gname varchar(20),no_of_players
varchar(20),coach_name varchar(20));

SQL> insert into game2 values(001,'football','11','aaa');

SQL> create table player(pid int primary key,pname varchar(20),addr varchar(20),club_name
varchar(20));

SQL> insert into player values(100,'mmm','pune','pfc');

SQL> create table gp(gid int,pid int);

SQL> insert into gp values(001,100);
```

1)Write a procedure which will display games details having number of players more than 5.

```
SQL> set serveroutput on
SQL> create or replace procedure p3(n in varchar)as cursor c3 is select gname,coach_name
from game2,player,gp where game2.gid=gp.gid and player.pid=gp.pid and no_of_players >
5;
2  c c3 %rowtype;
3  begin
4  open c3;
5  dbms_output.put_line('gname'||''||'coach_name');
6  Loop
7  Fetch c3 into c;
8  exit when c3 %notfound;
9  if(c.gname=n)then
10  dbms_output.put_line(c.gname||''||c.coach_name);
11  end if;
12  end loop;
13  close c3;
14   end;
15  /
Procedure created.
begin
 p3('football');
  end;
  4  /
gnamecoach_name
footballaaa
```

Another Way

```
SQL> set serveroutput on
SQL> create or replace procedure p5(n in number) as sum_no_of_players
game2.no_of_players %type;
  2  begin
  3  select sum(no_of_players) into sum_no_of_players from game2,player,gp where
game2.gid=gp.gid and player.pid=gp.pid and no_of_players=n;
  4  if (sum_no_of_players > 5)then
  5  dbms_output.put_line('sum no_of_players='||sum_no_of_players);
  6  else
  7  dbms_output.put_line('no_of_players does not exists');
  8  end if;
  9  end p5;
 10  /

Procedure created.
SQL> execute p5(11);
```

sum no_of_players=33

Another method

```
SQL> set serveroutput on
SQL>  create or replace procedure p3(n in varchar)as
  2   cursor c3 is select gname,coach_name from game2,player,gp where game2.gid=gp.gid
and player.pid=gp.pid and
  3   no_of_players<=(select sum(no_of_players ) from game2 where gname=n);
  5   c c3 %rowtype;
  6    begin
  7    open c3;
  8    dbms_output.put_line('gname'||''||'coach_name');
  9    loop
 10   fetch c3 into c;
 11   exit when c3 %notfound;
 12   if(c.gname=n)then
 13   dbms_output.put_line(c.gname||''||c.coach_name);
 14   end if;
 15   end loop;
 16    close c3;
 17    end;
 18  /
```

Procedure created.

```
SQL>  begin
  2   p3('football');
  3  end;
  4  /
gnamecoach_name
footballaaa
```

Another method

```
SQL> set serveroutput on
SQL> create or replace procedure p4(p_no in out number) as v_no number;
  2  begin
  3  select count(no_of_players)into v_no from game2,player,gp where game2.gid=gp.gid and
player.pid=gp.pid and no_of_players=p_no;
  4  p_no:=v_no;
  5  exception when no_data_found then p_no:=0;
  6  end p4;
  7  /
```

Procedure created.

```
SQL> declare c_no number;
  2  begin
  3  c_no:=&c_no;
  4  p4(c_no);
  5  if(c_no=0)then
  6  dbms_output.put_line('dept does not exist!.....');
  7  else
  8  dbms_output.put_line('no_of_players=' || c_no);
  9  end if;
 10 end;
 11   /
Enter value for c_no: 11
old   3: c_no:=&c_no;
new   3: c_no:=11;
no_of_players=3
```

2)Write a trigger which will fire before insert or update on Game having no_of_players less than or equal to zero. (Raise user defined exception and give appropriate message)

```
SQL> set serveroutput on
SQL>  create or replace trigger t5  before insert or update on game2
  2   for each row
  3   begin
  4   if (:new.no_of_players<=0)then
  5   raise_application_error (-20001,'no_of_players>0');
  6  end if;
  7  end;
  8  /

Trigger created.

SQL> insert into game2 values(4,'hollyball',-1000,'aaa');
insert into game2 values(4,'hollyball',-1000,'aaa')
            *
ERROR at line 1:
ORA-20001: no_of_players>0
ORA-06512: at "SCOTT.T5", line 3
ORA-04088: error during execution of trigger 'SCOTT.T5'
```

Slip 17

Consider the following Item_Supplier database

Company (name , address , city , phone , share_value)
Person (pname ,pcity)
Relationship between Company and Person is M to M relationship with descriptive attribute No_of_shares iConstraints: name,pname primary key
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

SQL> create table company0(cid int primary key,cname varchar(20),addr varchar(20),city varchar(20),phone int,share_value int);

SQL> create table person3(pno int primary key,pname varchar(20),pcity varchar(20));

SQL> create table com_per(cid int,pno int,no_of_shares int);

SQL> insert into company0 values(1,'aaa','koregaon','pune',1122334455,200);

SQL> insert into person3 values(11,'mmm','pimpari');

SQL> insert into com_per values(1,11,20);

1)Write a trigger before insert or update on No_of_shares field should not be zero.(Raise user defined exception and give appropriate message)

```
SQL> set serveroutput on
SQL> create or replace trigger t3 before insert or update on com_per
  2  for each row
  3  begin
  4  if(:new.no_of_shares<=0)then
  5  raise_application_error(-20001,'no_of_shares>0');
  6  end if;
  7  end;
  8  /
```

Trigger created.

SQL> insert into com_per values(6,16,-1000);

```
insert into com_per values(6,16,-1000)
            *
ERROR at line 1:
ORA-20001: no_of_shares>0
ORA-06512: at "SCOTT.T3", line 3

ORA-04088: error during execution of trigger 'SCOTT.T3'
```

2)Write a function to display total no_of_shares of a specific person.

```
SQL> set serveroutput on
SQL>  create or replace function f2(xyz in varchar) return number as abc number;
  2  begin
  3  select sum(person3.pno) into abc from company0,person3,com_per where
company0.cid=com_per.cid  and person3.pno=com_per.pno and pname='ppp';
  4   if sql %found then
  5  return(abc);
  6  else
  7  return null;
  8  end if;
  9  end f2;
 10   /
Function created.
SQL> begin
  2  dbms_output.put_line('company-'||f2('ppp'));
  3  end;
  4  /
company-13
PL/SQL procedure successfully completed.
```

Consider the following entities and their relationship.
Student (s_reg_no, s_name, s_class)
Competition (comp_no, comp_name, comp_type)
Relationship between Student and Competition is many-to-many with descriptive attribute rank and year.
Constraints:primary key, foreign key,primary key for third table(s_reg_no, comp_no, year),s_name and comp_name should not be null,
comp_type can be sports or academic.
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1)Write a function which will accept s_reg_no of student and returns total number of competition in which student has participated in a given year.

```
SQL> set serveroutput on
```

```
SQL> create or replace function fun1(nocomp in varchar) return number as nofcomp number;
  2  begin
  3  select count(competition.compno) into nofcomp from student1, competition,
student1competition where student1.sregno=student1competition.sregno and
competition.compno=student1competition.compno and student1.sregno=101;
  4  if sql %found then
  5  return(nofcomp);
  6   else
  7   return null;
  8   end if;
  9   end fun1;
 10   /

Function created.
SQL> begin
  2  dbms_output.put_line('no of competition-'||fun1(2015));
  3  end;
  4  /

no of competition-1
PL/SQL procedure successfully completed.
```

Another way

```
SQL> set serveroutput on
SQL> create or replace function fun1(nocomp in number) return number as nofcomp number;
  2  begin
  3  select count(competition.compno) into nofcomp from student1, competition,
student1competition where student1.sregno=student1competition.sregno and
competition.compno=student1competition.compno and year='2015';
  4 if sql %found then
  5 return 1;
  6 else
  7 return 0;
  8 end if;
  9 end fun1;
 10 /

Function created.

SQL> begin
  2  dbms_output.put_line('no of competition-'||fun1(2015));
  3  end;
```

4 /

2)Write a cursor which will display year wise details of competitions held.(Use parameterized cursor)

```
SQL>set serveroutput on
SQL>declare
2 cursor c1(yyyy student1competition.year%type)is select compname,comptype,year from student1,competition,student1competition where
student1.sregno=student1competition.sregno and
competition.compno=student1competition.compno order by year;
3 c c1%rowtype;
4 begin
5 open c1('&yyyy');
6 loop
7 fetch c1 into c;
8 exit when c1%notfound;
9 dbms_output.put_line(c.compname||' '||c.comptype||' '||c.year);
10 end loop;
11 close c1;
12 end;
13 /

Enter value for yyyy: 2015
old   5:     open c1('&yyyy');
new   5:     open c1('2015');

Running Sports 2011
Foot Ball Sports 2012
Paint academic 2013
Chess academic 2014
Quiz academic 2015

PL/SQL procedure successfully completed.
```

Consider the following entities and their relationship.
Student (s_reg_no, s_name, s_class)
Competition (comp_no, comp_name, comp_type)
Relationship between Student and Competition is many-to-many with descriptive attribute rank and year.
Constraints:primary key, foreign key,primary key for third table(s_reg_no, comp_no, year),s_name and comp_name should not be null,
comp_type can be sports or academic.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1)Write a function which will accept s_reg_no of student and returns total number of competition in which student has participated in a given year.

```
SQL> set serveroutput on
SQL> create or replace function fun1(nocomp in varchar) return number as nofcomp number;
  2  begin
  3  select count(competition.compno) into nofcomp from student1, competition,
student1competition where student1.sregno=student1competition.sregno and
competition.compno=student1competition.compno and student1.sregno=101;
  4  if sql %found then
  5  return(nofcomp);
  6   else
  7   return null;
  8   end if;
  9   end fun1;
 10   /

Function created.
SQL> begin
  2  dbms_output.put_line('no of competition-'||fun1(2015));
  3  end;
  4  /

no of competition-1
PL/SQL procedure successfully completed.
```

Another way

```
SQL> set serveroutput on
SQL> create or replace function fun1(nocomp in number) return number as nofcomp number;
  2  begin
  3  select count(competition.compno) into nofcomp from student1, competition,
student1competition where student1.sregno=student1competition.sregno and
competition.compno=student1competition.compno and year='2015';
  4 if sql %found then
  5 return 1;
  6 else
  7 return 0;
  8 end if;
  9 end fun1;
```

```
 10 /

Function created.

SQL> begin
  2  dbms_output.put_line('no of competition-'||fun1(2015));
  3  end;

  4  /
```

2)Write a cursor which will display year wise details of competitions held.(Use parameterized cursor)

```
SQL>set serveroutput on
SQL>declare
2 cursor c1(yyyy student1competition.year%type)is select compname,comptype,year from
student1,competition,student1competition where
student1.sregno=student1competition.sregno and
competition.compno=student1competition.compno order by year;
3 c c1%rowtype;
4 begin
5 open c1('&yyyy');
6 loop
7 fetch c1 into c;
8 exit when c1%notfound;
9 dbms_output.put_line(c.compname||' '||c.comptype||' '||c.year);
10 end loop;
11 close c1;
12 end;
13 /

Enter value for yyyy: 2015
old   5:     open c1('&yyyy');
new   5:     open c1('2015');

Running Sports 2011
Foot Ball Sports 2012
Paint academic 2013
Chess academic 2014
Quiz academic 2015

PL/SQL procedure successfully completed.
```

Slip 20

Consider the following entities and their relationships.

Driver (driver_id, driver_name, address)

Car (license_no, model, year)

Relation between Driver and Car is Many to Many with date and time as descriptive attribute.

Constraint: Primary key, driver_name should not be null.

```
SQL> create table Driver9(D_id int primary key,Dname varchar(15),Addr varchar(15));
SQL> insert into Driver9 values(1,'Dinesh','Daund');
SQL>create table car9(Lno int primary key ,model varchar(15),year int);
SQL> insert into car9 values(1,'Swift',2001);
SQL>create table dc9(D_id  int, Lno int, day varchar(15));
SQL> insert into dc9 values(1,1,'Monday');
```

1)Write a procedure to display car details used on specific day.

```
SQL> set serveroutput on
SQL> create or replace procedure p1(n in varchar)as cursor c1 is select
Dname,day,model,year from D
river9,car9,dc9 where Driver9.D_id=dc9.D_id and car9.Lno=dc9.Lno;
  2  c c1%rowtype;
  3     begin
  4    open c1;
  5    dbms_output.put_line('Dname'||''||'day'||''||'model'||''||'year');
  6    loop
  7    fetch c1 into c;
  8    exit when c1%notfound;
  9    if (c.day = n) then
 10   dbms_output.put_line(c.Dname||''||c.day||''||c.model||''||c.year);
 11    end if;
 12   end loop;
 13   close c1;
 14  end;
 15    /
```

Procedure created.

```
SQL> begin
  2  p1('Monday');
  3  end;
```

```
  4  /
Dnamedaymodelyear
DineshMondaySwift2001

PL/SQL procedure successfully completed.
```

2)Write a cursor which will display driver wise car details in the year 2018.

```
SQL>   set serveroutput on
SQL>   declare
  2        cursor c1 is select  dname,model,year from Driver9,car9,dc9 where
Driver9.d_id=dc9.d_id  and car9.lno=dc9.lno and year ='2001' ;
  3      c c1%rowtype;
  4      begin
  5      open c1;
  6      loop
  7      fetch c1 into c;
  8      exit when c1%notfound;
  9       dbms_output.put_line(c.dname||''||c.model||''||c.year);
 10      end loop;
 11      close c1;
 12      end;
 13  /
DineshSwift2001
RajAudi2001

PL/SQL procedure successfully completed.
```

Slip 21

College(code, college_name, address)
Teacher(teacher_id, teacher_name, Qualification, specialization, salary, Desg)
Relation between Teacher and College is Many to One.
Constraint: Primary Key, qualification should not be null.

1)Write a function which will accept college name from user and display total number of “Ph.D” qualified teachers.

```
SQL>create table teacher62(tid int primary key,teacher_name varchar(10),qualification varchar(10),specialization varchar(10),salary varchar(10),designation varchar(10));

SQL>create table college62(cid int primary key,college_name varchar(10),address varchar(10),tid int);

SQL>insert into teacher62 values(1,'tina','ph.d','drawing','50000','head');
```

SQL>insert into college62 values(102,'ness','pune','1');

```
create or replace function fun1(XYZ in varchar)return number as ABC number;
begin
select sum(teacher62.tid)into ABC from teacher62,college62 where teacher62.tid=college62.tid
and college_name = ‘ness’;
if sql%found then
return(ABC);
else
return null;
end if;
end fun1;
 /
```

Function created.

```
Begin
dbms_output.put_line('teachers-'||fun1('ph.d'));
end;
/
```

teachers-1
PL/SQL procedure successfully completed.

2)Write a cursor which will display college wise teacher details.

```
SQL>  set serveroutput on
SQL>  declare
  2   cursor c1 is select  teacher_name, qualification from teacher62,college62 where teacher62. tid = college62.tid order by college_name;
  3   c c1%rowtype;
  4    begin
  5    open c1;
  6    loop
  7    fetch c1 into c;
  8    exit when c1%notfound;
  9    dbms_output.put_line(c. teacher_name ||''||c.qualification);
 10    end loop;
 11    close c1;
 12    end;
 13  /
```

Slip22

Consider the following entities and their relationships.

Country (CId, CName , no_of_states, area, location, population)

Citizen(Id, Name, mother_toung, state_name)

Relation between Country and Citizen is one to many. Constraint: Primary key, area should not be null.

SQL>create table country9(c_id int primary key,cname varchar(15),Nos int,area varchar(15),location varchar(15),population int);

SQL>create table citizen9(id int primary key, name varchar(15),motherT varchar(10),sname varchar(15),c_id int);

SQL>insert into country9 values(1,'india',29,'abc','asia',1650);

SQL>insert into citizen9 values(1,'kishor','marathi','maharashtra',1);

1)Write a procedure to display name of citizens having mother toung "Marathi " and from "India";

```
SQL> set serveroutput on
SQL> create or replace procedure p1(n in varchar)as cursor c1 is select
location,name,motherT from c
ountry9,citizen9  where country9.c_id=citizen9.c_id and motherT ='marathi' and
cname='india';
    c c1%rowtype;
    begin
    open c1;
    dbms_output.put_line('location'||''||'name'||''||'motherT');
     loop
    fetch c1 into c;
    exit when c1%notfound;
    if (c.motherT = n) then
   dbms_output.put_line(c.location||''||c.name||''||c.motherT);
   end if;
   end loop;
   close c1;
```

```
  end;
  /

Procedure created.

SQL> begin
   p1('marathi');
   end;
   /
locationnamemotherT
asiakishormarathi

PL/SQL procedure successfully completed.
```

2)Write a trigger which will fire before insert or update on country having no_of_state less than equal to zero. (Raise user defined exception and give appropriate message)

```
SQL> set serveroutput on
SQL> create or replace trigger t5 before insert or update on country9
  2  for each row
  3  begin
  4  if(:new.no_state >=0) then
  5  raise_application_error(-20001,' no_state <0');
  6  end if;
  7  end;
  8  /

Trigger created.

SQL> insert into country9 values(5,'india',29,'abc','asia',1650);
insert into country9 values(5,'india',29,'abc','asia',1650)
            *
ERROR at line 1:
ORA-20001:  no_state <0
ORA-06512: at "SCOTT.T5", line 3
ORA-04088: error during execution of trigger 'SCOTT.T5'
```

Slip:-23

Wholesaler (w_no, w_name, address, city)
Product (product_no, product_name, rate)
Relation between Wholesaler and Product is Many to Many with quantity as descriptive attribute.

Constraint: Primary key, rate should be > 0.

```
SQL> create table wholesaler0 (wno int primary key,wname varchar(20),addr
varchar(20),city varchar(20));
SQL> insert into wholesaler0 values(100,'aaa','ab chowk','pune');
SQL> create table product3 (pno int primary key,pname varchar(20),rate int);
SQL> insert into product3 values(001,'mmm',500);
SQL> create table wp0 (wno int ,pno int);
SQL> insert into wp0 values(100,001);
```

1)Write a procedure which will display details of products supplied by “Mr. Patil”

```
SQL> set serveroutput on
SQL> create or replace procedure p1(t in varchar)as cursor c1 is select wname,pname,rate
from
  2  wholesaler,product,wp where wholesaler.wno=wp.wno  and product.pno=wp.pno and
wname='patil';
  3  c c1%rowtype;
  4  begin
  5  open c1;
  6  dbms_output.put_line('wname'||''||'pname'||''||'rate');
  7  loop
  8   fetch c1 into c;
  9  exit when c1 %notfound;
 10  if(c.wname=t)then
 11   dbms_output.put_line(c.wname||''||c.pname||''||c.rate);
 12  end if;
 13  end loop;
 14  close c1;
 15  end;
 16  /
Procedure created.
SQL> begin
  2  p1('patil');
  3  end;
  4  /
wnamepnamerate
patilbooks30
```

2)Write a cursor which will display wholesaler wise product details.(Use Parameterized cursor)

```
SQL>  set serveroutput on
SQL>  declare
 2   cursor c2(yyyy wholesaler0.wname %type) is select wname,pname from wholesaler0,product3,wp0 where wholesaler0.wno=wp0.wno and product3.pno=wp0.pno order by wname;
  3   c c2 %rowtype;
  4  begin
  5  open c2('&yyyy');
  6  loop
  7  fetch c2 into c;
  8  exit when c2 %notfound;
  9   dbms_output.put_line(c.wname||''||c.pname);
 10  end loop;
 11  close c2;
 12  end;
 13  /
Enter value for yyyy: 500
old   5: open c2('&yyyy');
new   5: open c2('500');
aaammm
bbbnnn
cccppp
```

Slip 24

<u>Slip:-23</u>

Wholesaler (w_no, w_name, address, city)
Product (product_no, product_name, rate)
Relation between Wholesaler and Product is Many to Many with quantity as descriptive attribute.
Constraint: Primary key, rate should be > 0.

```
SQL> create table wholesaler0 (wno int primary key,wname varchar(20),addr varchar(20),city varchar(20));
SQL> insert into wholesaler0 values(100,'aaa','ab chowk','pune');
SQL> create table product3 (pno int primary key,pname varchar(20),rate int);
SQL> insert into product3 values(001,'mmm',500);
SQL> create table wp0 (wno int ,pno int);
SQL> insert into wp0 values(100,001);
```

1)Write a procedure which will display details of products supplied by “Mr. Patil”

```
SQL> set serveroutput on
SQL> create or replace procedure p1(t in varchar)as cursor c1 is select wname,pname,rate
from
  2  wholesaler,product,wp where wholesaler.wno=wp.wno  and product.pno=wp.pno and
wname='patil';
  3  c c1%rowtype;
  4  begin
  5  open c1;
  6  dbms_output.put_line('wname'||''||'pname'||''||'rate');
  7  loop
  8   fetch c1 into c;
  9  exit when c1 %notfound;
 10  if(c.wname=t)then
 11   dbms_output.put_line(c.wname||''||c.pname||''||c.rate);
 12  end if;
 13  end loop;
 14  close c1;
 15  end;
 16  /
Procedure created.
SQL> begin
  2  p1('patil');
  3  end;
  4  /
wnamepnamerate
patilbooks30
```

2)Write a cursor which will display wholesaler wise product details.(Use Parameterized cursor)

```
SQL>  set serveroutput on
SQL>  declare
  2   cursor c2(yyyy wholesaler0.wname %type) is select wname,pname from
wholesaler0,product3,wp0 where wholesaler0.wno=wp0.wno and product3.pno=wp0.pno
order by wname;
  3   c c2 %rowtype;
  4  begin
  5  open c2('&yyyy');
```

```
  6  loop
  7  fetch c2 into c;
  8  exit when c2 %notfound;
  9   dbms_output.put_line(c.wname||''||c.pname);
 10  end loop;
 11  close c2;
 12  end;
 13  /
Enter value for yyyy: 500
old   5: open c2('&yyyy');
new   5: open c2('500');
aaammm
bbbnnn
cccppp
```


RDS-25

09:31

Consider the following entities and their relationships.

Gym (GName, city, charges, scheme)

Member (ID, MName, phoneNo, address)

Relation between Gym and member is one to many. Constraint: Primary Key, charges must be greater than 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1)Write a procedure to display member details of gym located at “Pimpri”’

SQL> set serveroutput on

SQL> create or replace procedure p1(n in varchar) as cursor c1 is select GName,MName,city from Gym,Member where Gym.id=Member.id and Gym.city='pimpri';

```
  2  c c1 %rowtype;
  3  begin
  4  open c1;
  5  dbms_output.put_line('GName'||''||'MName'||''||'city');
  6   loop
  7   fetch c1 into c;
  8  exit when c1 %notfound;
  9   if(c.pname=n)then
```

```
 10  dbms_output.put_line(c.GName||''||c.MName||''||C.city);
 11   end if;
 12   end loop;
 13   close c1;
 14    end;
 15  /
```

2)Write a cursor which will display gym wise member details.(Use Parametrized Cursor)

```
SQL> set serveroutput on
SQL> declare
  2    cursor c1(yyyy  Gym.GName %type)is select GName,MName from
Gym,Member  where where Gym.id=Member.id order by GName;
  3    c c1%rowtype;
  4    begin
  5    open c1('&GName ');
  6    loop
  7    fetch c1 into c;
  8    exit when c1%notfound;
  9    dbms_output.put_line(c.GName||''||c.MName);
 10   end loop;
 11    close c1;
 12    end;
```

•

RDS-26

09:19

Consider the following entities and their relationships.

Project (pno, pname, start_date, budget, status)

Department (dno, dname, HOD, loc)

The relationship between Project and Department is Many to One.

Constraint: Primary key.Project Status

Constraints: C – Completed,P - Progressive, I – Incomplete

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1)Write a procedure to display the name of HOD who has completed maximum project.

```
SQL> set serveroutput on
SQL> create or replace procedure p1(n in varchar) as cursor c1 is  select pname,dname,HOD
from Department,Project where Department.dno=Project.dno and pname=(select
max(pname)from Department,Project where Department.dno=Project.dno)group by HOD ;
  2  c c1 %rowtype;
  3  begin
  4  open c1;
  5  dbms_output.put_line('pname'||''||'dname'||''||'HOD');
  6   loop
  7   fetch c1 into c;
  8  exit when c1 %notfound;
```

```
 9  if(c.pname=n)then
10  dbms_output.put_line(c.pname ||''||c.dname||''||C.HOD);
11   end if;
12   end loop;
13   close c1;
14    end;
15  /
```

2)Write a trigger which will fire before insert or update on project having budget less than or equal to zero. (Raise user defined exception and give appropriate message)

```
SQL>  set serveroutput on
SQL>  create or replace trigger t4 before insert or update on project
  2   for each row
  3   begin
  4   if(:new.budget<=0)then
  5   raise_application_error(-20001,'budget>0');
  6   end if;
  7   end;
  8   /

Trigger created.
```

Slip 27

Consider the following entities and their relationships.
Plan (plan_no, plan_name, nooffreecalls, freecalltime, fix_amt)
Customer (cust_no, cust_name, mobile_no)
Relation between Plan and Customer is One to Many. Constraint: Primary key, fix_amt should be greater than 0.
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

```
SQL> create table plan(plan_no int primary key,plan_name varchar(10),nooffreecalls
varchar(10),freecalltime varchar(10),fix_amt varchar(10));
SQL> insert into plan values(1,'monthly','61','12:00','10000');

SQL> create table cust(cno int primary key,cname varchar(10),mbno int,plan_no int);
SQL> insert into cust values(1,'aaa',2345678,1);
```

1)Write a procedure to display the plan having minimum response.

```
SQL> set serveroutput on
SQL> create or replace procedure p1(y in varchar)as cursor c1 is select
nooffreecalls,plan_name from  plan,cust where plan.plan_no=cust.plan_no;
  2  c c1%rowtype;
  3  begin
  4  open c1;
  5  dbms_output.put_line('nooffreecalls'||''||'plan_name');
```

```
  6  loop
  7  fetch c1 into c;
  8  exit when c1 %notfound;
  9  if(c.plan_name=y)then
 10  dbms_output.put_line(c.nooffreecalls||''||c.plan_name);
 11  end if;
 12  end loop;
 13  close c1;
 14  end;
 15  /

Procedure created.

SQL> begin
  2  p1('monthly');
  3  end;
  4  /
nooffreecallsplan_name
61monthly


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

SQL> set serveroutput on
SQL> create or replace procedure p5(n in varchar) as min_nooffreecalls plan.nooffreecalls
%type;
  2  begin
  3  select min(nooffreecalls) into min_nooffreecalls from plan,cust
where  plan.plan_no=cust.plan_no;
  4  if(min_nooffreecalls > 0) then
  5  dbms_output.put_line('min nooffreecalls='||min_nooffreecalls);
  6  else
  7  dbms_output.put_line('plan does not exists');
  8  end if;
  9  end p5;
 10  /

Procedure created.

SQL> execute p5('61');
min nooffreecalls=50

PL/SQL procedure successfully completed.
```

2)Write a trigger which will fire before insert or update on mobile number having length less than or greater than10. (Raise user defined exception and give appropriate message)

```
SQL> Set serveroutput on
SQL> Create or replace trigger t5 before insert or update on cust
  2  for each row
  3  begin
  4  if(:new. mbno <=10) then
  5  raise_application_error(-20001, mbno >10');
  6  end if;
  7  end;
  8  /
```

Slip 28

Consider the following entities and their relationships.

Bill (billno, day, tableno, total)

Menu (dish_no, dish_desc, price)

The relationship between Bill and Menu is Many to Many with quantity as descriptive attribute.

Constraint: Primary key, price should be > 0.

```
SQL>create table bill(bno int primary key,tableno int,total int);
SQL>insert into bill values(1,201,3);
SQL>create table menu(mno int primary key,dish_no int,discription varchar(15),price int);
SQL>insert into menu values(101,1,'xyz','2000');
SQL>create table bm(bno int,mno int,quantity varchar(20));
SQL>insert into bm values(1,101,'aaa');
```

1)Write a function which accept a table number and display total amount of bill for a specific table

```
SQL> set serveroutput on
SQL> create or replace function f1(abc in varchar) return number as xyz number;
  2  begin
  3  select sum(bill.total)into xyz from bill where tableno='203';
  4  if sql %found then
  5  return (xyz);
  6  else
  7  return null;
  8  end if;
  9  end f1;
```

```
 10  /
```

Function created.

```
SQL> begin
  2  dbms_output.put_line('amt-'||f1('203'));
  3  end;
  4  /
```

2)Write a cursor which will display table wise menu details

```
SQL>  set serveroutput on
SQL>  declare
  2   cursor c1 is select  discription,price  from bill,menu,bm where bill.bno=bm.bno and
menu.mno=bm.mno order by tableno;
  3   c c1%rowtype;
  4    begin
  5    open c1;
  6    loop
  7    fetch c1 into c;
  8    exit when c1%notfound;
  9    dbms_output.put_line(c. discription ||''||c. price);
 10    end loop;
 11    close c1;
 12    end;
 13  /
```

Slip 29

Consider the following entities and their relationships.
Employee (emp_id, emp_name, address)
Investment (inv_no, inv_name, inv_date, inv_amount)
Relation between Employee and Investment is One to Many.
Constraint: Primary key, inv_amount should be > 0.

```
SQL>create table employee(e_id int primary key,e_name varchar(10),address varchar(10));
SQL>insert into employee values(1,'reshma','koregoan');
SQL>create table investment(inv_no int primary key,inv_name varchar(10),inv_date
varchar(10),inv_amount int,e_id int);
SQL>insert into investment values(1,'house','15thaug','50000',1);
```

1)Write a function which will return total investment amount of a particular client.

```
SQL> set serveroutput on
SQL> create or replace function fun1(abc in varchar)return varchar as xyz varchar(10);
```

```
  2  begin
  3  select sum(investment.inv_amount)into xyz from employee,investment where
employee.e_id=investment.e_id and e_name='roma';
  4  if sql %found then
  5  return(xyz);
  6  else
  7  return null;
  8  end if;
  9  end fun1;
 10  /

Function created.

SQL> begin
  2  dbms_output.put_line('invamount-'||fun1('roma'));
  3  end;
  4  /
```

2)Write a trigger which will fire before insert or update on Investment having investment amount less than 50000. (Raise user defined exception and give appropriate message)

```
SQL>  set serveroutput on;
SQL>  create or replace trigger t2  before insert or update on investment
  2  for each row
  3   begin
  4  if(:new.inv_amount<=50000) then
  5   raise_application_error(-20001,'inv_amount>0');
  6   end if;
  7   end;
  8   /

Trigger created.SQL> insert into investment values(1,'house','15thaug','-50000',1);
insert into investment values(1,'house','15thaug','-50000',1)
            *
ERROR at line 1:
ORA-20001: inv_amount>0
ORA-06512: at "SCOTT.T2", line 3
ORA-04088: error during execution of trigger 'SCOTT.T2'
```

Slip 29

Consider the following entities and their relationships.

Employee (emp_id, emp_name, address)

Investment (inv_no, inv_name, inv_date, inv_amount)

Relation between Employee and Investment is One to Many.
Constraint: Primary key, inv_amount should be > 0.

```
SQL>create table employee(e_id int primary key,e_name varchar(10),address varchar(10));
SQL>insert into employee values(1,'reshma','koregoan');
SQL>create table investment(inv_no int primary key,inv_name varchar(10),inv_date
varchar(10),inv_amount int,e_id int);
SQL>insert into investment values(1,'house','15thaug','50000',1);
```

1)Write a function which will return total investment amount of a particular client.

```
SQL> set serveroutput on
SQL> create or replace function fun1(abc in varchar)return varchar as xyz varchar(10);
  2  begin
  3  select sum(investment.inv_amount)into xyz from employee,investment where
employee.e_id=investment.e_id and e_name='roma';
  4  if sql %found then
  5  return(xyz);
  6  else
  7  return null;
  8  end if;
  9  end fun1;
 10  /
```

Function created.

```
SQL> begin
  2  dbms_output.put_line('invamount-'||fun1('roma'));
  3  end;
  4  /
```

2)Write a trigger which will fire before insert or update on Investment having investment amount less than 50000. (Raise user defined exception and give appropriate message)

```
SQL>  set serveroutput on;
SQL>  create or replace trigger t2  before insert or update on investment
  2  for each row
  3   begina
  4  if(:new.inv_amount<=50000) then
  5   raise_application_error(-20001,'inv_amount>0');
  6   end if;
  7   end;
```

```
  8  /

Trigger created.SQL> insert into investment values(1,'house','15thaug','-50000',1);
insert into investment values(1,'house','15thaug','-50000',1)
            *
ERROR at line 1:
ORA-20001: inv_amount>0
ORA-06512: at "SCOTT.T2", line 3
ORA-04088: error during execution of trigger 'SCOTT.T2'
```

FYBBACA Sem-II Web Technology

Slip1

Q1. Write a JavaScript program to calculate the volume of a sphere.

```
<html>
<script>
function volume()
{
var t_val=document.getElementById("txt").value;
var rad=parseInt(t_val);
var vol=(4.0/3.0)*Math.PI*Math.pow(rad,3);
document.getElementById('volume').value=vol;
}
</script>
</head>
<body>
<table border="1">
<tr><td>Enter the radius of Sphere: </td><td><input type="text" id="txt"
size="30"/></td></tr>
<tr><td>Volume</td><td><input type="text" name="volume" id="volume"></td></tr>
<tr><td> </td><td><input type="submit" value="Calculate" onclick="volume()"></td></tr>
</table>
 </body>

</html>
```

Q2. Create HTML page to Divide the frames in to different sections as shown below and add appropriate HTML files to each frame.

frames.html

```
<html>

<frameset rows="30%,*">
<frame src="header.html" name="f1">

<frameset rows="30%,70%" cols="50%,50%">
<frame src="link.html" name="f2">
<frame src="pune.html" name="f3">

<frameset cols="30%,30%">
<frame src="b.html" name="f4">
```

```
<frame src="2.html" name="f5">
</frameset>

<frame src="3.html" name="f6">

</frameset>
</frameset>

</html>
```

header.html

```
<html>
<body>
<b>First Frame :</b><br>
Your Name and address</BODY>
</HTML>
```

link.html

```
<html>
<body>
<b>Second Frame :</b><br>
Bulleted list of favourite colours
</body>
</html>
```

pune.html

```
<html>
<body>
<b>Third Frame :</b><br>
Numbered List of Cities
</body>
</html>
```

b.html

```
<html>
<body>
```

```
<b>Fourth Frame:</b><br>
Scrolling Message
</body>
</html>
```

2.html

```
<html>
<body>
<b>Fifth Frame:</b><br>
Blinking Reminders
</body>
</html>
```

3.html

```
<html>
<body>
<b>Sixth Frame:</b><br>
Name of Countries
</body>
</html>
```

Slip 2

Write a java script program to accept a number form user and display its multiplication table

```
<html>
<body>
<script type='text/javascript'>
var num = prompt("Enter Number", "0") //prompt user to enter the number
var num = parseInt(num); //parse the num to number
var i = 0;
document.write('<table border="1" cellspacing="0">');
for(i=1;i<10;i++) {
document.write("<tr><td>" + num + " x " + i + " = " + num*i + "</td></tr>");
}
document.write("</table>");
</script>
</body>

</html>
```

Write the HTML code to create the following table. Use internal CSS to format the table

```
<html>
```

```
<head>
<style type="text/css">
body{background-color:pink;}
th{color:Blue;}
</style>
</head>
<body>
<table border=1>

<tr>
<th rowspan="2">Book No</th>
<th rowspan="2"">BookName</th>
<th colspan="2">Price</th>
</tr>

<tr>
<th>Rs.</th>
<th>Paise</th>
</tr>

<tr>
<td>101</td>
<td>DBMS</td>
<td>200</td>
<td>50</td>
</tr>

</table>
</body>
</html>
```

Slip 3

Q1. Write a java script program to accept a number form user and calculate and display its sum of
digits

```
<HTML><body>
<script>
function sum()
{
var sum=0;
var no=parseInt(frm.txt1.value);
while(no>0)
{
```

```
sum=sum+no%10;
no=Math.floor(no/10);
}
alert("Sum of digits  "+sum);
 }
</script>
<form name="frm">
Enter a Number:<input name="txt1" type="text" />
<input name="b1" onclick="sum();" type="button" value="display" /></form>
</BODY>

</HTML>
```

Q2. Write HTML code to design a web as per given specification. Divide the browser screen into two frames. The first frame will display the heading. Divide the second frame into two columns. The frame on the left should be name of cities consisting of hyperlinks. Clicking on any one of these hyperlinks will display related information in right hand side frame as shown below

frames.html

```
<html>
<frameset rows="30%,*">
<frame src="header.html" name="frame1">
<frameset cols="30%,*">
<frame src="links.html" name="frame2">
<frame src="pune.html" name="frame3">
</frameset>
</frameset>
</html>
```

header.html

```
<html>
<body><h1 align="center"><font color="red">IT Industries in
India</FONT></H1></BODY>
</HTML>
```

links.html

```
<html><head><title> Frame Example </title></head>
<body><b>City</b><br>
<ol type="1">
```

```
<li><a href="pune.html" target="frame3">pune</A></li><br>
<li><a href="b.html" target="frame3">banglore</A></li><br>
</ol>
</body>
</html>
```

pune.html

```
<html><body><h3>Pune</h3>
<ul type="disc"><li>Infosys</li><li>Persistent</li></ul>
</body>
</html>
```

b.html

```
<html><body><h3>Mumbai</h3>
<ul type="disc"><li> ---</li><li>---</li><li>----</li><li>----</li></ul>
</body>
</html>
```

Slip 4

Q1. Write a java script program to accept a number from user and check whether it is Armstrong number or not.

```
<html>
<head>
<script>
function armstr()
{
var arm=0,a,b,c,d,num;
num=Number(document.getElementById("no_input").value);
temp=num;
while(temp>0)
{
a=temp%10;
temp=parseInt(temp/10); // convert float into Integer
arm=arm+a*a*a;
}
if(arm==num)
{
alert("Armstrong number");
}
else
{
alert("Not Armstrong number");
```

```
}
}
</script>
</head>
<body>
Enter any Number: <input id="no_input">
<button onclick="armstr()">Check</button></br></br>
</body>
</html>
```

Q2. Create HTML web page with following specifications

i)Title should be about your College.
ii)Put image in the background
iii)Place your college name at the top of page in large text followed by address in smaller size.
iv)Add names of courses offered, each in different color, style and font
v)Add scrolling text about college.
vi)Add any image at the bottom. (use External CSS to format the webpage)

a.css

```
h1 {
  color: navy;
  margin-left: 20px;
  font-size:30px;
}

body{background:url('1.jpg')}
h2{font-size:20px; color:red;font-family:Arial;}
h4{font-size:10px;color:green;font-family:verdana;}
```

a.html

```
<html>

<head><link rel="stylesheet" type="text/css" href="a.css"></head>

<body>
<h1><center ><h1>FORESIGHT</h1></center></h1>
```

```
<center><h6>Pune near ymca campus</h6></center>


<h2>COURSE</h2>
<h4>BCA</h4>
<ul type="disc">
<li>fybca</li>
<li>sybca</li>
<li>tybca</li>
</ul>

<h4>BBA</h4>
<ul type="disc">
<li>fybba</li>
<li>sybba</li>
<li>tybba</li>
</ul>

<h4>BCOM</h4>
<ul type="disc">
<li>fybcom</li>
<li>sybcom</li>
<li>tybcom</li>
</ul>

<marquee>Foresight college of Commerce,Pune </marquee>
<img src="images.jpg" height="40%" width="50%">
</body>
</html>
```

Slip 5

Q.1Write a java script program to accept a number from user and check whether it is perfect number or not.

```
<html>
<head>
<script>
function perfectNumber()
{
var flag,number,remainder,addition = 0,i;
number = Number(document.getElementById("N").value);
flag = number;
for(i = 0; i < number; i++)
{
```

```
remainder = number%i;
if(remainder==0)
{
addition += i;
}
}
if(addition == flag)
{
window.alert("The inputed number is Perfect");
}
else
{window.alert("The inputed number is not Perfect");
}
}
</script>
</head>
<body>
<br>
<h1>Whether a number is Perfect or not</h1>
Enter The Number :<input type="text" name="n" id = "N"/>
<br>
<center><button onClick="perfectNumber()">CHECK</button>
</body>
</html>
```

Q2. Write HTML code to design a website for Online Shopping. Design home page which consist of list of items each with hyperlink, clicking on which should display related information on separate web page. (Use external CSS to format each web page)

a.css

```
body
{
background-color: lightblue;
}

h1
{
color: navy;
margin-left: 20px;
}
```

frames.html

```
<html><head><title> Frame Example </title></head>
<frameset rows="30%,*">
<frame src="header.html" name="frame1">
<frameset cols="30%,*">
<frame src="links.html" name="frame2">
<frame src="pune.html" name="frame3">
</frameset>
</frameset>
</html>
```

header.html

```
<html>
<body>
<h1 align="center"><font color="red">Online Shopping</FONT></H1>
</BODY>
</HTML>
```

links.html

```
<html>
<body>
<b>Item</b><br>
<ol type="1">
<li><a href="pune.html" target="frame3">Shirt</A></li><br>
<li><a href="b.html" target="frame3">Jeans</A></li><br>
</ol>
</body>
</html>
```

pune.html

```
<html>
<head><link rel="stylesheet" type="text/css" href="a.css"></head>
<body><h3>Shirt</h3>
<ul type="disc"><li>Price </li></ul>
<img src="a.jpg" height="30%" width="40%">
</body>
</html>
```

b.html

```
<html>
<head><link rel="stylesheet" type="text/css" href="a.css"></head>
<body>
<h3>Jeans</h3>
<ul type="disc"><li>Price </li></ul>
```

```
<img src="a.jpg" height="30%" width="40%">
</body>
</html>
```

Slip 6

Q1. Write java script program to accept a number from user and check whether it is prime number or not

```
<html>
<head>
<script>
function Prime()
{
var i,flag=0,number;
number = Number(document.getElementById("N").value);
for(i=2; i <= number/2; i++)
{
if(number%i == 0)
{
flag = 1;
break;
}
}
if(flag == 0)
{
window.alert(number+"-The inputed number is Prime");
}
else
{
window.alert(number+"-The inputted number is not Prime");
}
}
</script>
</head>
<body>
<br>
<h1>Whether a number is Prime or not</h1>
Enter The Number :<input type="text" name="n" id = "N"/>
<br>
<center><button onClick="Prime()">CHECK</button>
</body>
</html>
```

Q2. Write a HTML code to display calendar of current month in tabular format. Use proper color for week days and holidays. Display month name, year and images as advertisement at the beginning of the calendar.

```
<html>
<head>

<style>
body
{
background-image: url("Blue Water Background.jpg");
}

</style>
</head>
<body>

<b><font color="red">March 2020</font></b>

<table border=1>

<tr>
<td><font color="red">Sun</font></td>
<td>Mon</td>
<td>Tues</td>
<td>Wed</td>
<td>Thurs</td>
<td>Fri</td>
<td>Sat</td>
</tr>

<tr>
<td><font color="red">1</font></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
```

```
 <tr>
<td><font color="red">8</font></td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>

</table>

</body>

</html>
```

Slip 7

Q1. Write a java script program to accept a string from user and display the count of vowel characters from that string.

```
<html>
<head>
<script>
function PQR()
{
var str = document.getElementById('a').value;
var count = 0;
for (var i = 0; i < str.length; i++)
{
if (str.charAt(i).match(/[aeiouAEIOU]/))
{
count++;
}
}
alert(count);
}
</script>
</head>
<body>
Enter Text   : <input  id='a'> </br></br>
<button onclick="PQR()">click</button>
</body>
</html>
```

Q2. Write a HTML code to display Theory Time Table of FYBBA(CA). Use internal CSS to format the table

```
<html>
<head>
<style>
body
{
background-image: url("1.jpg");
}
</style>
</head>
<body>
<b><font color="red">Time Table 2020</font></b>
<table border=1>
<tr>
<td>Time</td>
<td>Mon</td>
<td>Tues</td>
<td>Wed</td>
<td>Thurs</td>
<td>Fri</td>
<td>Sat</td>
</tr>

<tr>
<td>09:00-09:45</td>
<td> Rdbms</td>
<td>C</td>
<td>OB</td>
<td>BM</td>
<td>F A/C</td>
<td>WT</td>
</tr>

</table>
</body>
</html>
```

Slip 8

Q1. Write a java script program to accept a string and character from user and check the count of occurrences of that character in
string .

```
<html>
<body>
<script>
function displayCount() {
setTimeout(function() {
var str = document.getElementById('str1').value;
var letter = document.getElementById('letter1').value;
letter = letter[letter.length-1];
var lCount;
for (var i = lCount = 0; i < str.length; lCount += (str[i++] == letter));
document.querySelector('p').innerText = lCount;
return lCount;
}, 50);
}
 </script>
Enter String: <input type="text" id="str1"><br><br>
Enter Letter: <input onkeypress="displayCount()" type="text" id="letter1"><br><br>
<button onclick="displayCount()">Click for Result</button><br><br>
result= <p></p>
</body>
</html>
```

Q2.Create HTML page with following specifications Title should be about your self.
i)color the background should be pink.
ii)Place your name at the top of page in large text and centered.
iii)Add names of your family members each in different size, color, style and font.
iv)Add scrolling text about your family.
v)Add any image at the bottom. (Use internal CSS to format the web page)

Slip 9

Write a java script program to accept a string and check whether the input string is palindrome string or not

```
<html>
<head>
```

```
<script>
function myFunction()
{
//get the value from textbox
var str = document.getElementById('txtbox').value;
//call checkPalindrome() and pass str
var result = checkPalindrome(str);
alert('The Entered String "'+str +'" is "'+result+'"');
}
function checkPalindrome(str)
{
var orignalStr;
//lowercase the string
str = str.toLowerCase();
//store the str in orignalStr for future use
orignalStr = str;
//reverse the entered string
str = str.split(''); //split the entered string
str = str.reverse(); //reverse the order
str = str.join(''); //then join the reverse order array values
var reverseStr = str;

//finally check both the Original string stored in orignalStr
//and reversed to find the palindrom
if(orignalStr == reverseStr){
return 'Palindrome'; // return "Palindrome" if true
}else{
return 'Not Palindrome';
}
}
</script>
</head>
<body>
<form action="" method="get">
<input type="text" id="txtbox" placeholder="Enter String" />
<input type="button" onclick="myFunction()" value="Check Palindrome" />
</form>
</body>
</html>
```

Write the HTML code which generates the following output.(use internal CSS to format the table)

```
<html>
<head>
<style>
body
{
background-image: url("1.jpg");

}
</head>
<body>
<table border=1>

<tr>
<th>Country</th>
<th colspan="2"">Population</th>
</tr>


<tr>
<td rowspan="3">India</td>
<td>1998</td>
<td>85</td>
</tr>

<tr>
<td>1999</td>
<td>90</td>
</tr>

<td>2000</td>
<td>100</td>
</tr>


<tr>
<td rowspan="3">USA</td>
<td>1998</td>
<td>85</td>
</tr>

<tr>
<td>1999</td>
<td>90</td>
</tr>
```

```
<td>2000</td>
<td>100</td>
</tr>


</table>
</body>
</html>
```

Slip 9

Q1. Write a JavaScriptProgram to read a number from user, store its factors into the array anddisplay that array. (Handle onClick Event)

Q2. Write HTML code which generates the following output and display each element of list in different size, color & font. Use inline CSS to format the list.

1.DYP
• Courses
§ BCS
§ BCA
2.Indira
• Courses
§ BCA
§ MCs
3.ATSS
• Courses
§ BBA
§ BCS

```
 <html>
<head>
<style>
body
{
background-image: url("1.jpg");
}
ol{color:red;}
ul{color:blue;}
</style>
</head>
<body>
<ol type=1>
```

```
<li>DYP</li>
<ul type = "disc">
<li>COURSES</li>
<ul type = "square">
<li>BCS</li>
<li>BCA</li>
</ul>

</ul>

<li>Indira</li>
<ul type = "disc">
<li>COURSES</li>
<ul type = "square">
<li>BCA</li>
<li>MCS</li>
</ul>
</ul>


 </ol>
</body>
</html>
```

Slip 10

Q1. Write a JavaScriptProgram to read a number from user, store its factors into the array anddisplay that array. (Handle onClick Event)

Q2. Write HTML code which generates the following output and display each element of list in different size, color & font. Use inline CSS to format the list.

1.DYP
- Courses
  - § BCS
  - § BCA

2.Indira
- Courses
  - § BCA
  - § MCs

3.ATSS
- Courses
  - § BBA
  - § BCS

```
 <html>
<head>
<style>
body
{
background-image: url("1.jpg");
}
ol{color:red;}
ul{color:blue;}
</style>
</head>
<body>
<ol type=1>
<li>DYP</li>
<ul type = "disc">
<li>COURSES</li>
<ul type = "square">
<li>BCS</li>
<li>BCA</li>
</ul>

</ul>

<li>Indira</li>
<ul type = "disc">
<li>COURSES</li>
<ul type = "square">
<li>BCA</li>
<li>MCS</li>
</ul>
</ul>


 </ol>
</body>
</html>
```

Slip 11

Write a JavaScript program to accept a string and a position (number) from user and display the character at specified position.

```
<html>
<body>
```

```
<script type = "text/javascript">
var str=new String(prompt("Enter a string"));
for(i=0;i<str.length;i++)
{
document.writeln("<br />str.charAt("+i+") is:" + str.charAt(i));
}
</script>
</body>
</html>
```

Write HTML code which generates the following output and display each element of list in different size, color & font. Use external CSS to format the list

- Non flowering plants
  - Fern
  - Spore
- Flowering plants
  - Lilly
  - Rose
    1. Red Rose
    2. Pink Rose

```
<html>
<head>
<head><link rel="stylesheet" type="text/css" href="ab.css"></head>
<body>

<ul type = "disc">
<li>Non Flowering Plant</li>
<ul type = "circle">
<li>Fern</li>
<li>Spore</li>
</ul>

</ul>


<ul type = "disc">
<li>Flowering Plant</li>
<ul type = "square">
<li>Lilly</li>
<li>Rose</li>
```

```
      <ol>
<li>Red Rose</li>
<li>Pink Rose</li>
</ol>
 </ul>

</ul>
```

ab.css

```
body
{
background-image: url("1.jpg");
}
ol{color:red;}
ul{color:blue;}
```

Slip 12

<!--8)Write a JavaScript program to design student registration form and perform following validation:- Check all fields should not contain a null value- Check name field contains only alphabets.- Mobile No. field should be of 10 digits. - Pin code field should be of 06 digits.-->

```
<html>
<head>
<script>
function validate()
{
var name=document.getElementById("text1").value;
var mob=document.getElementById("text2").value;
var add=document.getElementById("text3").value;
var city=document.getElementById("text4").value;
var state=document.getElementById("text5").value;
var pin=document.getElementById("text6").value;
if(name==null||name=="")
alert("Name Should not be Null");
if(!isNaN(name))
alert("Name Should only contain Characters");
if(mob.length!=10)
alert("Mobile number should be exactly 10 digits long.");
if(add==null||add=="")
alert("Address Should not be Null.");
if(city==null||city=="")
```

```
alert("City Should not be Null.");
if(state==null||state=="")
alert("State Should not be Null.");
if(pin.length!=6)
alert("Pin Code should be exactly 6 digits long.");
}
</script>
</head>
<body>
<table>
<h1>Student Registration Form</h1>
<tr><td>Name:</td> <td><input type="text"id="text1"></td></tr>
<tr><td>Mobile:</td><td><input type="text"id="text2"></td></tr>
<tr><td>Address:</td><td><input type="text"id="text3"></td></tr>
<tr><td>City:</td><td><input type="text"id="text4"></td></tr>
<tr><td>State:</td><td><input type="text"id="text5"></td></tr>
<tr><td>Pin:</td><td><input type="text"id="text6"></td></tr>>
<tr><td><input type="button"value="submit" onclick="validate()"/></td>
<td><input type="reset" value="clear" onclick="reset()"/></td></tr>
</table>
</body>
</html>
```

Name and Mobile Number

```
<html>
<head>
<title>Form</title>
<script type='text/javascript'>
function chkForm()
{
//validate form fields

/* first step is to fetch all entry values */
 idVal=document.getElementById('t1').value;
MobileNumber=document.getElementById('t2').value;
 /* check id field for required length */
if(idVal.length<5)
{
alert('User name should countain 5 characters');
document.getElementById('t1').value='';
document.getElementById('t1').focus();
return false;
}
// validation of alphabetics
```

```
if(idVal)
{
for(var i = 0;i<idVal.length; i++)
{
if(idVal.charAt(i) < 'A' || idVal.charAt(i) > 'Z' && idVal.charAt(i) <'a' || idVal.charAt(i)>'z')
{
alert("Invalit Text,not accept numbers, special characters, alphanumeric characters")
return false;
}
}
}
 //validation of mobile number.
 if(document.getElementById('t2').value ==")
{
alert("Enter 10 digit mobile number");
return false;
}
if(document.getElementById('t2').value != "")
{
var y = document.getElementById('t2').value;
 if(isNaN(y)||y.indexOf(" ")!=-1)
{
alert("Invalid Mobile No.");
document.getElementById('mobile_number').focus();
return false;
}
 if (y.length>10 || y.length<10)
{
alert("Mobile No. should be 10 digit");
document.getElementById('mobile_number').focus();
return false;
}
if (!(y.charAt(0)=="9" || y.charAt(0)=="8"))
{
alert("Mobile No. should start with 9 or 8 ");
document.getElementById('mobile_number').focus();
return false
}
}
return true;
}
</script>

</head>
```

```
<body>
<table border="1" width="60%">
<form action="#" name="adminForm" id="adminForm">
<tr><td>Name</td><td><input type="text" name="t1" id="t1"></tr>
<tr><td>Mobile No</td><td><input type="text" name="t2" id="t2"></tr>
<tr><td align="center" colspan="2">
<input type="submit" name="submit" Value="Submit" onclick="return chkForm();"
/></td></tr>
</form>
</table>
</body>
</html>
```

12. Write a JavaScript program to compare the values of password and confirmed password field and display message accordingly. Also perform the validation to check any of the field should not be empty

```
<html>
<head>
<script>
function validate()
{
var username = document.getElementById("username").value;
var password = document.getElementById("password").value;
var cpassword = document.getElementById("cpassword").value;
if (username=="" ||  password=="" || cpassword=="" )
{
alert ("Fields Should not b empty");
}
else if(password==cpassword)
{
alert("You entered all the details ");
return false;
}
else
alert("Password Fields doesn't match");
}
</script>
<body>
<div class="container">
<div class="main">
<caption>Javascript Login Form Validation</caption>
<form id="form_id" method="post" name="myform">
```

```
<table>
<tr>
<td>User Name :</td>
<td><input type="text" name="username" id="username"/></td>
</tr>

<tr>
<td>Password :</td>
<td><input type="password" name="password" id="password"/></td>
</tr


<tr>
<td>Confirm Password :</td>
<td><input type="password" name="cpassword" id="cpassword"/></td>
</tr>



<tr><td></td>
<td><input type="button" value="Login" id="submit" onclick="validate()"/></td>
</tr>


</table>
</form>
</div>
</body>
</html>
```

Slip 13

2)Write a HTML code which will divide web page in three frames. First frame should consists of name of college as heading. Second frame should consists of name of courses with hyperlink. Once click on any course it should display subject of that course in third frame.

frames.html

```
<html>
<frameset cols="30%,30%,40%">
<frame src="header.html" name="frame1">
<frame src="links.html" name="frame2">
<frame src="pune.html" name="frame3">
</frameset>
```

```
</html>
```
header.html
```
<html>
<body>
<h1 align="center">
<font color="red">ABC College</FONT>
</H1>
</BODY>
</HTML>
```

links.html
```
<html>
<body>
<b>Course</b>
<br>
<ol type="1">
<li><a href="a.html" target="frame3">BCA</A></li><br>
<li><a href="b.html" target="frame3">BBA</A></li><br>
</ol>
</body>
</html>
```

a.html
```
<html>
<body><h3>BCA</h3>
<ul type="disc">
<li>OB</li>
<li>C</li>
<li>DBMS</li>
</ul>
</body>

</html>
```
Slip 14

Write a HTML code to display the name of your family members each in different color, size and style. Also display the following polynomial expression
a0+a1x1+a2x2+a3x3+a4x4

```
<html>
<head>
<style>
sup{color:red;
font-family: "Times New Roman";}
```

```
sub{color:blue;
font-style: italic;
font-size: 40px;}
</style>
</head>
<body>
<b>
a<sub>0</sub>+
a1X<sup>1</sup>+
a2X<sup>2</sup>+
a3X<sup>3</sup>+
a4X<sup>4</sup>

</body>
```

3.Write a JavaScript Program to accept user name and password from an user, if Username and Password is same then display his score card on the next page as shown below.

login.html

```
<html>
<head>
<script type="text/javascript">
function fun1()
{
var u=document.f1.t1.value
var p=document.f1.t2.value
if(u=="asha"&&p=="asha")
window.alert("login");
if(u!="asha")
window.alert("Invalid username");
if(p!="asha")
window.alert("Invalid password");
}
</script>
</head>
<form name="f1" action="one.html">
<table border="1">

<tr>
<td>login</td>
<td><Input type="text" name="t1"></td>
</tr>

<tr>
<td>password</td>
```

```
<td><Input type="password" name="t2"></td>
</tr>

<tr>
<td></td>
<td><Input type="submit" value="submit" onclick="fun1()"></td>
</tr>

</form>
</body>
</html>
```

One.html

```
<html>
<body>
<center><h1>Foresight College</h1></center>
<center><h3>Name of the Student :Adhira Ranjegaonkar  Seat No.1234</h3></center>
<hr>
<center>
<table border=1>
<tr>
<td>Sr.No</td>
<td>Subject</td>
<td>External Exam(out of 80)</td>
<td>Internal Exam(out of 20)</td>
<td>Total Marks (out of 100)</td>
<td>Result</td>
</tr>


<tr>
<td>501</td>
<td>core java</td>
<td>56</td>
<td>15</td>
<td>71</td>
<td>Pass</td>
</tr>

<tr>
<td>502</td>
<td>Web Technology</td>
<td>67</td>
```

```
<td>18</td>
<td>85</td>
<td>Pass</td>
</tr>

</table>
<center>
</body>
</html>
```

Slip 15

30)Write a JavaScript program to Display current Day, Date, Month, Year and Time on the web page and greet the user accordingly.

```
<html>
<head>
<script language="JavaScript">
 function Greetings()
{
var theDate=new Date();
var theHour=theDate.getHours();
if(theHour<=6)
{
alert("Early Good Morning.");
}
if((theHour>6)&&(theHour<=12))
{
alert("Good Morning.");
}
 if((theHour>12)&&(theHour<=17))
{
alert("Good Afternoon");
}
if(theHour>17)
{
 alert("Good Evening.");
}
 }
</script>
</head>
<body onload=Greetings();>

<script type="text/javascript">
```

```
var curdate=new Date();
document.write(curdate);
</script>
<center>
<h1>Greetings According to the times of the Day</h1>
</center>

</body>

</html>
```

Q2.Create HTML page with following specifications
i)Title should be about your City.
ii)Color the background by Pink color.
iii)Place your city name at the top of page in large text and in blue color.
iv)Add names of the landmarks in your city, each in different color, style and font
v)Add scrolling text about your City.
vi)Add any image at the bottom.

(Use inline CSS to format the web page)

Slip 16

Q.1.Write a java script code to accept a sentence from the user and alters it as follows: Every space is replaced by * and digits are replaced by?

Q2.Write HTML code which generates the following output and display each element of list in different size, color & font. Use inline CSS to format the list.

```
<html>
<head>
<title>list</title></head>
<body style="background-color: lightblue;">
<ul>
<li>honda</li>
<ul type="square">
<li>petrol</li>
<ol type="1)">
<li>honda city</li>
<li>brio</li>
</ol>
<li>diesel</li>
```

```
<ol>
<li>amaze</li>
<li>brio</li>
</ol>
</ul>
<li>maruti-suzuki</li>
<ul type="square">
<li>petrol</li>
<ol>
<li>swift</li>
<li>rifz</li>
</ol>
<li>diesel</li>
<ol>
<li>swift-desire</li>
</ol>
</ul>
 </ul>
</body>

</html>
```

Slip 17

Q1.Write a java script code to accept a string from user and display the occurrences of every vowel character from String .

Refer Slip 7 and Slip 8

Q2.Design an HTML form for customer registration visiting a departmental store. Form should consists of fields such as name, contact no, gender, preferred days of purchasing, favorite item(to be selected from a list of items),suggestions etc.You should provide button to submit as well as reset the form contents.

```
<html>
<body>
<form>
<h1>Customer Registration</h1>
<table border=1>

<tr>
<td>Name </td>
<td><input type="text" size="20">
```

```
</tr>

<tr>
<td>Contact no </td>
<td><input type="text" size="20">
</tr>

<tr>
<td>Gender</td>
<td><input type="radio" size="20">male <input type="radio" size="20">female</td>
</tr>

<tr>
<td>days of purchasing</td>
<td><input type="text" size="20">
</tr>

<tr>
<td>favorite item</td>
<td><select name="example">
<option value="item1">Item 1
<option value="item2">Item 2
<option value="item3">Item 3
</select>
</tr>

<tr>
<td>Suggestion</td>
<td><textarea rows="4" cols="50"></textarea
</tr>

<tr>
<td><input type="reset" value="Reset"></td>
<td><input type="submit" value="Submit"></td>
</tr>

</table>
</form>
</body>

</html>
```

Slip 18

Write a java script program to accept the value of n and display all odd numbers up to n.

```
<html>
<head>
<script>
function printOddNums()
{
//get the start and end range from user
var start = document.getElementById("start").value;
var end = document.getElementById("end").value;
var oddNums = "<br>Odd Numbers:<br>";
for(i=start; i<=end; i++){
// let's divide the value by 2
// if the reminder is not a zero then it's an odd number
if(i % 2 != 0){
oddNums += i + "<br>";
}
}
//print the values
document.getElementById("result").innerHTML = oddNums;
}
</script>
</head>
<body>
Start: <input type="number" min="0" id="start" value="1" />
End: <input type="number" id="end" min="1" value="20" />
<input type="button" onclick="printOddNums()" value="Print Odd Numbers" />
<div id="result"></div>
</body>

</html>
```

Write the HTML code which generates the following output. (Use external CSS to format the given table)

```
<html>
<body>
<table border=1>

<tr>
<th rowspan="2">Book No</th>
<th rowspan="2"">BookName</th>
<th colspan="2">Price</th>
```

```
</tr>

<tr>
<th>Rs.</th>
<th>Paise</th>
</tr>

<tr>
<td>101</td>
<td>DBMS</td>
<td>200</td>
<td>50</td>
</tr>

</table>
</body>
</html>
```

Slip 19

Q1. Write a java script code to accept a number form user and display its factorial.

```
<html>

<BODY>
 <center><table border=1>
<form  name=calculate>

<tr>
<td>Value :</td>
<td> <input type=text name=val1 value=" "></td>
</tr>

<tr>
<td> Action: </td>
<td> <input type="radio" value="square" name="gender"
 onClick="squre(form)"> square

<input type="radio" value="Cube" name="gender"
onClick="cube(form)"> Cube

<input type="radio" value="factorial" name="gender"
onClick="factorial(this.form,val1.value)"> Factorial
```

```
 </td>
</tr>

<tr>
<td>
Result : <input type=text  name=val2 value=" ">
</td>
<td>
<input type=reset name="Reset" value="Reset"></b>
</td>
</tr>
</table>
</center>

<SCRIPT language="JavaScript">
function squre(form)
{
form.val2.value=form.val1.value*form.val1.value;
}


function cube(form)
{
form.val2.value=form.val1.value*form.val1.value*form.val1.value;
}

function factorial(f,n)
{
fact=1;
for(i=1;i<=n;i++)
fact=fact*i;
f.val2.value=fact;
}
</SCRIPT>
</BODY>
 </HTML>
```

Q2. Design an HTML form to take the information of a customer for booking a travel plan consisting of fields such as name, address, contact no., gender, preferred season(Checkboxes), location type(to be selected from a list) etc. You should provide button to submit as well as reset the form contents. (All the fields should be properly aligned)

Slip 20

Q1.Write a java script code to accept a number n from user and display first n terms of Fibonacci series

```
<html>
<body>
<script type="text/javascript">
var var1 = 0;
var var2 = 1;
var var3;

var num =prompt("Enter No:-","0");
var num=parseInt(num);
document.write(var1+"<br />");
document.write(var2+"<br />");

for(var i=3; i <= num;i++)
{
var3 = var1 + var2;
var1 = var2;
var2 = var3;
document.write(var3+"<br />");
}
</script>
</body>
</html>
```

Q2.Create HTML page with following specifications

i)Title should be about your Car.

ii)Color the background by Pink color.

iii)Place your car name at the top of page in large text and in green color.

iv)Add names of features in your car, each in different color, style and font

v)Add scrolling text about your Car.

vi)Add any image at the bottom.

(Use external CSS to format the web page)

Slip 21

Q1.Write a java script code to accept the values of x and y and then display xy

```
<html>
<script>
function calc()
{
var t11=document.getElementById("t1").value;
```

```
var a=parseInt(t11);
var t12=document.getElementById("t2").value;
var b=parseInt(t12);
var vol=Math.pow(a,b);

document.getElementById('volume').value=vol;
}
</script>
</head>
<body>
<table border="1">
<tr><td>Enter 1 NO: </td><td><input type="text" id="t1" size="30"/></td></tr>
<tr><td>Enter 2 NO: </td><td><input type="text" id="t2" size="30"/></td></tr>
<tr><td>Result</td><td><input type="text" name="result" id="volume"></td></tr>
<tr><td> </td><td><input type="submit" value="Calculate" onclick="calc()"></td></tr>
</table>
 </body>
</html>
```

Q2.Write HTML code which generates the following output and display each element of list in different size, color & font. Use internal CSS to format the list.

```
<html>
<head>
<style>
body
{
background-color: lightblue;
}

/style>
</head>
<body>
<ul type="circle">
<li> Coffee</li>
<li> Tea </li>
  <ul type="square">
    <li> Black Tea </li>
<li> Green Tea</li><br>
<ol type="1">
   <li>Africa</li>
```

```
     <li>China</li>
</ol>
</ul>
</body>

</html>
```

Slip 22

Q1.Write a java script code to accept a string and write a function to calculate length of string.

```
<html>
<head>
</head>
<body>
<script type = "text/javascript">
var str = prompt("Enter a String",0);
document.write("str.length is:" + str.length);
</script>
</body>
</html>
```

Q2.Create HTML page to Divide the frames in to different sections as shown below and add appropriate HTML files to each frame.

```
<html>
<head>
<title> Frame Example </title>
</head>
<frameset rows="20%,40%,40%">
<frame src="header.html" name="frame1">
<frameset cols="50%,50%">
<frame src="a.html" name="frame2">
<frame src="b.html" name="frame3">
</frameset>
<frameset cols="30%,35%,35%">
<frame src="c.html" name="frame4">
<frame src="d.html" name="frame5">
<frame src="e.html" name="frame6">
</frameset>
</frameset>
```

</html>
Slip 23
Slip23

Write a java script code to accept a number and write a function to calculate sum of digits of that number

Write HTML code to create following table. (use External CSS to format the table)

html>
<body>
<table border=1>

<tr>
<th ROWSPAN="2">Course</th>
<th colspan="3">Fee Structure</th>
<th ROWSPAN="2">year</th>
</tr>

<tr>
<td>Fy</td>
<td>Sy</td>
<td>Ty</td>
</tr>

<tr>
<td>BSC</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>2017</td>
</tr>

<tr>
<td>BCA</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>2017</td>
</tr>

</table>

</body>
</html>

Slip 24

Q1. Write a java script code to accept a number from user and write a function to calculate sum of all odd digits of that
number.

Q2. Write html code to display following list. (use internal CSS to format the list)

Arts
- BA
- MA

ii. Commerce
- Bcom
- Mcom

iii. Science
- B.Sc.
- M.Sc.

```
<html>
<body>
<ol type ="i">
<li>Art</li>
<ul type="Disc">
<li>BA</li>
<li>MA</li>
</ul>

<li> Commerce</li>
<ul type="Disc">
<li>Bcom</li>
<li>Mcom</li>
</ul>

<li>Science</li>
<ul type="Disc">
<li>B.Sc</li>
<li>M.Sc</li>

</ul>
</ol>
</body>
```

```
</html>
```

Slip 25

1]Write a JavaScript function that reverse a input number

```
<html>
<script type ="text/javascript">
function rev_num()
{
var num = prompt("Enter the number to be reveresed :", " ");
var n= num;
var rev = 0, rem;
while (n>0)
{
rem = n % 10;
rev = rev * 10 + rem ;
n = Math.floor(n/10);
}
document.write("The given number is : " +num+ " <br/> The reversed number is : " +rev+
"\n");
}
</script>
<body style="" onload="rev_num();">
<body>
</html>
```

2] Refer Slip 1

Slip 27

Write a javascript function to compute the sum of factors of a input number

```
 <html>
<body>
<script>
function sum() {
var sum = 0, i, str,num1;
num1 = number(document.getelementbyid("n").value);
 str = num1.tostring();
sum = 0;
for (i = 0; i < str.length; i++) {
sum += parseint(str.charat(i), 10);
}
window.alert(sum);
}
</script>
</head>
<body>
```

```
enter a number : <input type="text" id="n"><br/>
<button onclick="sum()"> sum is </button>
<body>
</html>
```

Write a html code to display calendar of current month in tabular format. use proper color for week days and holidays. display month name, year and images as advertisement at the beginning of the calendar.

```
<html>
<body>
 <table cellpadding="10" border="10" cellspacing="10"> <h1> <img src="1.png"
height="40" width="70" border="1" align="left">january 2021 <img src="1.png"
height="40" width="70" border="1" align="right"></h1>
 <tr>
<th><font color="red">sun</font></th>
<th>mon</th>
<th>tus</th>
<th>wed</th>
<th>thu</th>
<th>fri</th>
<th>sat</th>
</tr>
 <tr>
<th> </th>
<th> </th>
<th> </th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
 <tr>
<th><font color="red"><b>5</font></th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
 <tr>
<th><font color="red"><b>12</font></th>
<th>13</th>
```

```
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
</tr>
 <tr>
<th><font color="red"><b>19</font></th>
<th>20</th>
<th>21</th>
<th>22</th>
<th>23</th>
<th>24</th>
<th>25</th>
</tr>

<tr>
<th><font color="red"><b>26</font></th>
<th>27</th>
<th>28</th>
<th>29</th>
<th>30</th>
<th>31</th>
<th> </th>
</tr>
 </table>
</body>
</html>
```

Slip 28

Q1. Write a JavaScript function that checks whether a input string is palindrome or not.

```
<html>
<head>
<script>
function myFunction()
{
var str = document.getElementById('a').value;
var result = checkPalindrome(str);
alert('The Entered String "'+str +'" is "'+result+'"');
}
function checkPalindrome(str)
{
var orignalStr;
orignalStr = str;
```

```
str = str.split('');
str = str.reverse();
str = str.join('');
var reverseStr = str;
if(orignalStr == reverseStr){
return 'Palindrome';
}else{
return 'Not Palindrome';
}
}
</script>
</head>
<body>
<input type="text" id="a" placeholder="Enter String" />
<input type="button" onclick="myFunction()" value="Check Palindrome" />
</body>
</html>
```

Q2. Write HTML and CSS code to design a web page. Divide the browser screen into two frames. The first frame will display the heading. The second frame contains a menu consisting of hyperlinks. Clicking on any one of these hyperlinks will display related information in a new page

```
<html>
<frameset rows = "30%,*">
<frame name = "top" src = "frame_1.html" />
<frameset cols = "30%,*">
<frame name = "main" src = "frame_2.html" />
<frame name = "button" src = "frame.html" />
</frameset>
</frameset>
</html>
```

frame_1.html

```
<html>
<body>
<head><h1><font> IT Industries in INDIA</h1></head>
</body>
</html>
```

frame_2.html

```
<body>
<ul>City
<ol type="1">
<li><a href="pune.html" target="button">Pune</a></li>
<li><a href="Mumbai.html" target="button">Mumbai</a></li>
```

```
</ol>
</ul>
</body>
</html>
```

pune.html

```
<body>
<ul type="square">Pune
<ul type="circle">
<li>Infosys1</li>
<li>Persistent1</li>
<li>Microsoft1</li>
</ul>
</ul>
</html>
```

mumbai.html

```
<body>
<ul type="square">Pune
<ul type="circle">
<li>Infosys1</li>
<li>Persistent1</li>
<li>Microsoft1</li>
</ul>
</ul>
</html>
```

Slip 28

Slip 28

Q Write a JavaScript program to construct the following pattern up to n lines, using a nested for loop.

```
*
*       *
 *       *       *
  <html>
<script type="text/javascript">
var i, j;
for(i=1; i <= 3; i++)
{
for(j=1; j<=i; j++)
{
 document.write('*');
}
 document.write('<br/>');
```

```
}
</script>
</html>
```

Q2. Design a HTML form for Bus Ticket Reservation consisting of fields for Name, Address, contact no, source station(Dropdown list), Destination station, Date of booking, date of journey, no of passenger, name of passenger, gender of passenger etc. You should provide button to submit as well as reset the form contents. (Use proper alignment)

```
 <html>
<body>
  <form style="padding:50px; border:10; border-style: solid;">
<Table  height="70%" width="80%">
<font face="arial" size="5" align="center"> Bus Ticket Reservation From </font>
 <tr>
<td>Name: </td>
<td><input type="text" name="First Name"></td>
</tr>
 <tr>
<td>Address: </td>
<td><input type="text" name="First Name"></td>
</tr>
 <tr>
<td>Contact no. </td>
<td><input type="text" name="contact no."></td></tr>
 <tr><td>Station:</td>
<td>
<select>
<option value="Mumbai">Mumbai</option>
<option value="New Delhi">New Delhi</option>
<option value="Bangalore">Bangalore</option>
<option value="London">London</option>
</select></td>
</tr>
 <tr><td>Destination Station: </td>
<td><input type="text" name="First Name"></td></tr>
</tr>
 <tr><td>Date of booking :</td>
<td><input type="date-local"></td></tr>
 <tr><td>Date of Journey :</td>
<td><input type="date-local"></td></tr>
 <tr><td>No. of Passenger: </td>
<td><input type="text" name="contact no."></td></tr>
 <tr><td>Name of Passenger: </td>
<td><input type="text" name="First Name"></td>
```

```
</tr>
 <tr><td>Gender: </td>
<td><input type="radio" name="gender" value="male" checked> Male
<input type="radio" name="gender" value="male"> Female</td>
</tr>
 <tr><td>Suggestions</td><td><textarea name="message"></td></tr>
<input type="submit" value="submit" style=" target:submit;">
 </table>
</form>
</body>
</html>
```

Slip 29

Q1. Write a JavaScript function that accept three numbers and display the larger number

```
 <html>
<head>
<script>
function largest()
{
var num1, num2, num3;
num1 = Number(document.getElementById("N1").value);
num2 = Number(document.getElementById("M1").value);
num3 = Number(document.getElementById("O1").value);

if(num1>num2 && num1>num3)
{
window.alert(num1+"-is greatest");
}
else if(num2>num1 && num2>num3)
{
window.alert(num2+"-is greatst");
}
else if(num3>num1 && num3>num1)
{
window.alert(num3+"is greatest");
}
}
</script>
</head>
<body>

<br><br>
Enter number 1: <input type="text" id="N1"></input><br><br>
Enter number 2: <input type="text" id="M1"></input><br><br>
Enter number 3: <input type="text" id="O1"></input><br><br>
```

```
<button onclick="largest()">OK</button>
</body>
</html>
```

Q2. Create HTML page with following specifications

i) Title should be about your City.
ii) Color the background by Pink color.
iii) Place your city name at the top of page in large text and in blue color.
iv) Add names of the landmarks in your city, each in different color, style and font
v) Add scrolling text about your City.
vi) Add any image at the bottom.

(Use Internal CSS to format the web page)

Refer Slip 4,8,12,15,20

```
<head>
<style>
body {  background-color: linen;
}

</style>
</head>
<body>
```

Slip 30

Q1. Write a JavaScript program to construct the following pattern up to n lines, using a nested for
loop.

```
A
B       C
D       E       F
```

```
<html>
<head>
<script type="text/javascript">
var i, j, k = 65;
for(i=65; i<=67; i++)
{
for(j=65; j<=i; j++)
document.write(String.fromCharCode(k++) +" ");
document.write("<br>");
}
</script>
</head>
```

<body>
</body>
</html>

Q2. Write a HTML code to create the following table. Use External CSS to format the table.

College/Courses	Arts		Commerce	
	UG	PG	UG	PG
D. Y. Patil, Pimpri	BA	MA	B.Com	M.Com
Indira College	BA	MA	BBA(CA)	MCA(Commerce)
Wadia College	BA	MA	B.Com	M.Com(Ecommerce)

```
<html>
<head>
<link rel="stylesheet" href="mystyle.css">
</head>
<body>
<table width="50%" align="left" cellpadding="5" cellspacing="2"  border="3">
<tr>
<td rowspan="2">College/Courses</td>
<td colspan="2">Arts</td>
<td colspan="2">Commerce</td>
</tr>

<tr align="center">
<td width="25%"><b>UG</b></td>
<td><b>PG</b></td>
<td><b>UG</b></td>
<td><b>PG</b></td>
</tr>
<tr>
<td>D. Y. Patil, Pimpri</td>
<td>BA</td>
<td>MA</td>
<td>B.Com</td>
<td>M.Com</td>
</tr>
<tr>
<td>Indira College</td>
<td>BA</td>
```

```
<td>MA</td>
<td>BBA(CA)</td>
<td>M.com (Commerce)</td>
</tr>
<tr>
<td>Wadia College</td>
<td>BA</td>
<td>MA</td>
<td>B.Com</td>
<td>M.Com(Ecommerce)</td>
</tr>
</table>
</body>
</html>
```

mystyle.css

```
body {background-color: lightblue;}
```