PROCEDURES:

**1.Display the limit of devices of the user who gives maximum data usage.**

SET SERVEROUTPUT ON SIZE 2000;

DECLARE

PROCEDURE FINDLIM

IS

N\_LIM NUMBER;

BEGIN

select limit\_of\_devices INTO N\_LIM from laptop\_router

where data\_usage=(select max(data\_usage) from laptop\_router);

DBMS\_OUTPUT.PUT\_LINE('LIMIT OF DEVICES' ||N\_LIM);

END;

BEGIN

FINDLIM;

END;

/

**2.Name the user who allows minimum data usage.**

SET SERVEROUTPUT ON SIZE 2000;

DECLARE

PROCEDURE MINDATA

IS

V\_NAME LAPTOP\_ROUTER.NAME%TYPE;

BEGIN

select name INTO V\_NAME

from laptop\_router

where data\_usage=(select min(data\_usage) from laptop\_router);

DBMS\_OUTPUT.PUT\_LINE(V\_NAME);

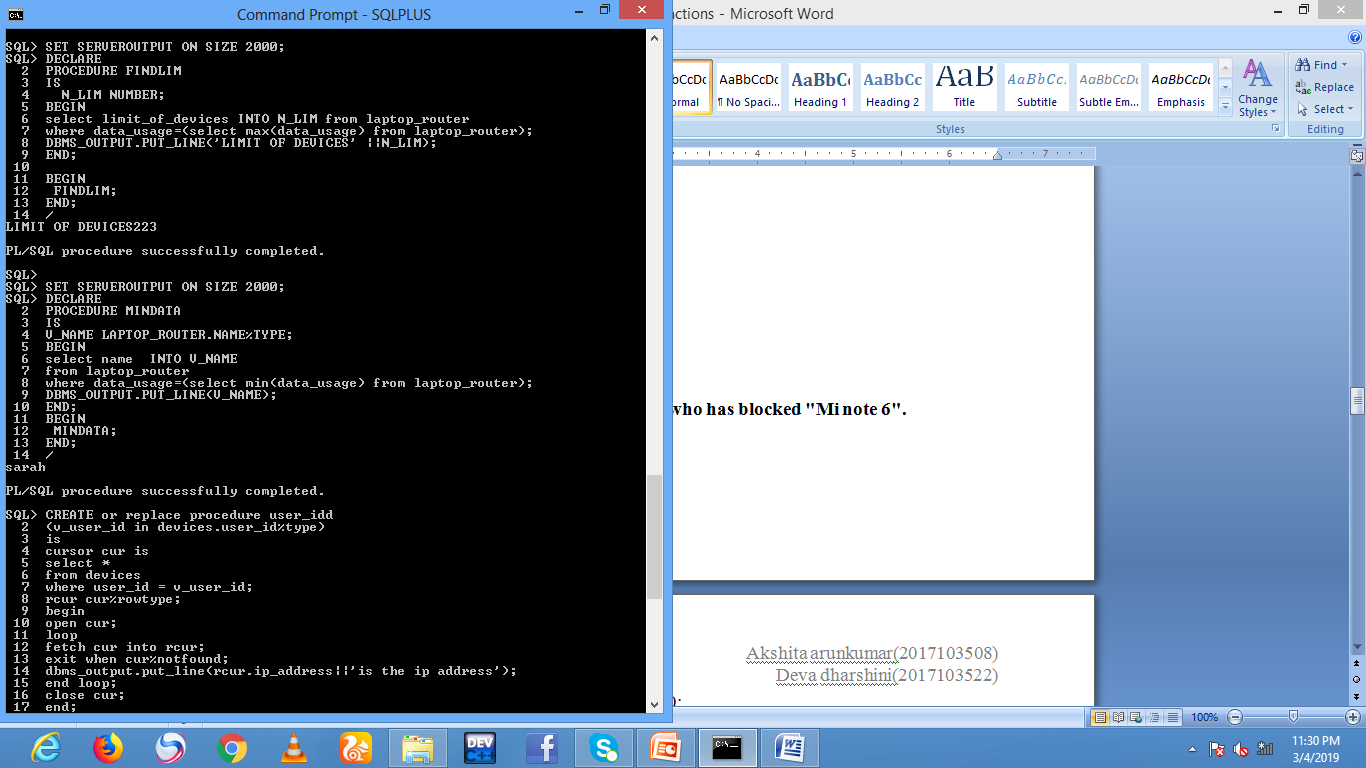
END;

BEGIN

MINDATA;

END;

/



**3.List the IP address of the devices connected with the user id "system".**

CREATE or replace procedure user\_idd

(v\_user\_id in devices.user\_id%type)

is

cursor cur is

select \*

from devices

where user\_id = v\_user\_id;

rcur cur%rowtype;

begin

open cur;

loop

fetch cur into rcur;

exit when cur%notfound;

dbms\_output.put\_line(rcur.ip\_address||'is the ip address');

end loop;

close cur;

end;

/

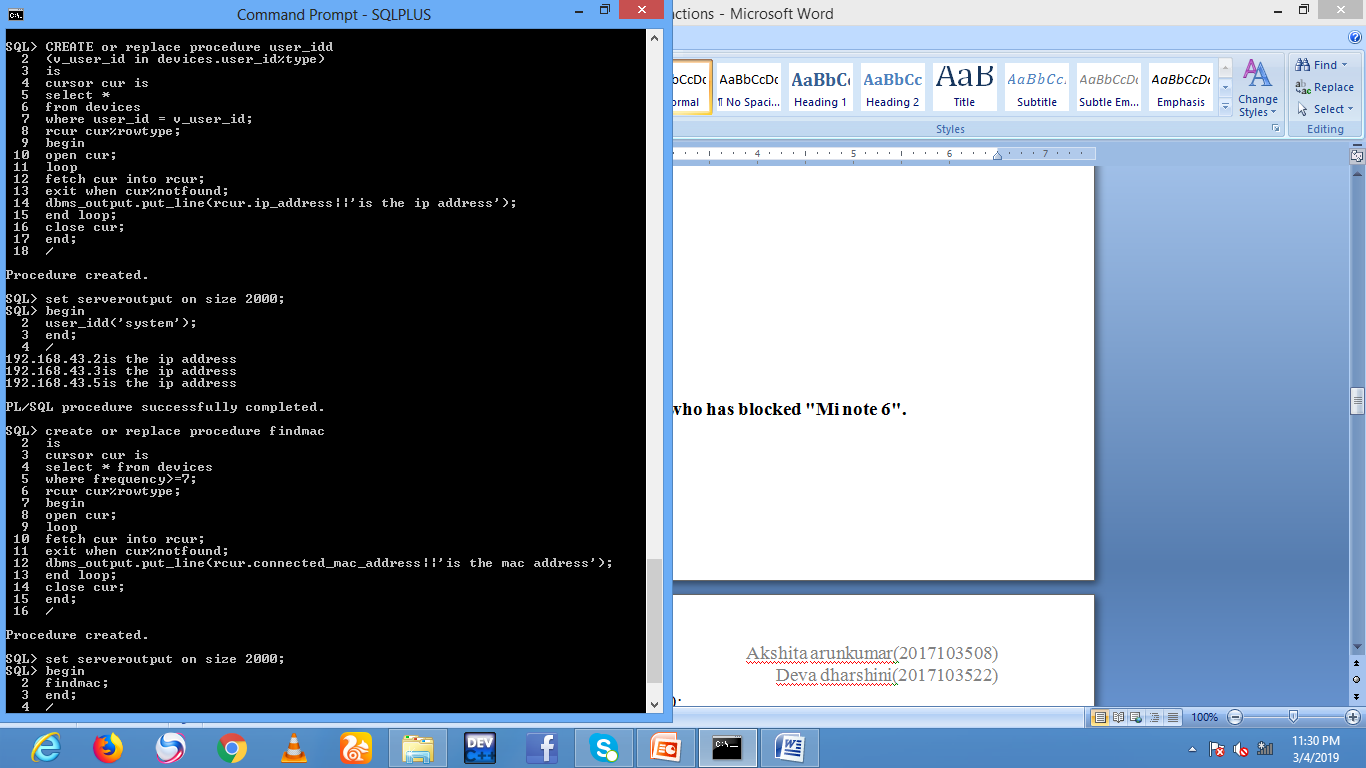
set serveroutput on size 2000;

begin

user\_idd('system');

end;

/



**4.Display the Mac Address of the devies which have connected more than 7 times.**

create or replace procedure findmac

is

cursor cur is

select \* from devices

where frequency>=7;

rcur cur%rowtype;

begin

open cur;

loop

fetch cur into rcur;

exit when cur%notfound;

dbms\_output.put\_line(rcur.connected\_mac\_address||'is the mac address');

end loop;

close cur;

end;

/

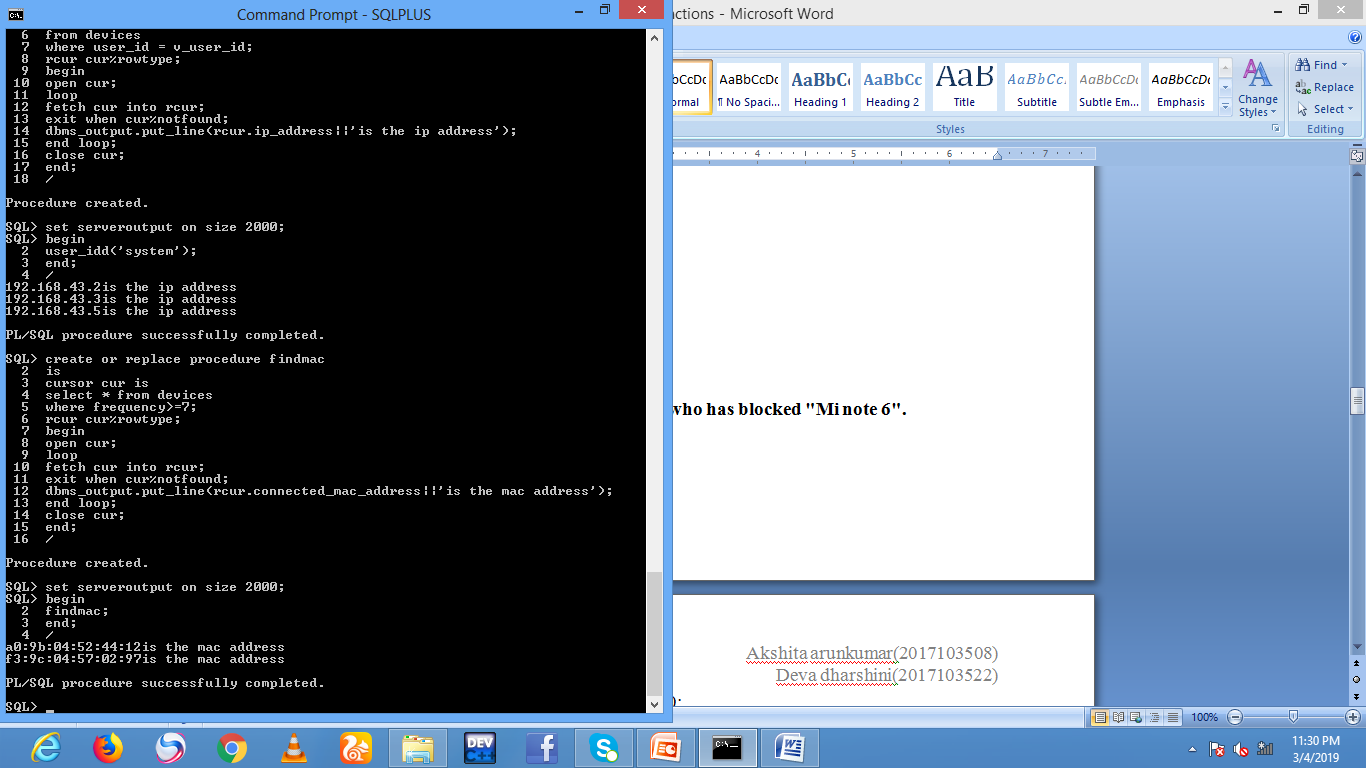
set serveroutput on size 2000;

begin

findmac;

end;

/



FUNCTIONS:

**1.Display the department of the user who has blocked "Mi note 6".**

SET SERVEROUTPUT ON SIZE 2000;

DECLARE

V\_SYS VIEW\_NEW1.DEPARTMENT%TYPE;

X BLOCK\_LIST.BLOCKED\_DEVICE\_ID%TYPE;

FUNCTION FIND(X IN BLOCK\_LIST.BLOCKED\_DEVICE\_ID%TYPE)

RETURN VIEW\_NEW1.DEPARTMENT%TYPE

IS

C VARCHAR(10);

BEGIN

SELECT DEPARTMENT

INTO C FROM VIEW\_NEW1

where user\_id=(select user\_id from block\_list where blocked\_device\_id=X);

RETURN C;

END;

BEGIN

x:='mi note 6';

V\_SYS:=FIND(X);

DBMS\_OUTPUT.PUT\_LINE('DEPARTMENT ' || V\_SYS);

END;

/

**2.Display the address where the device id "192.168.43.2" is connected.**

SET SERVEROUTPUT ON SIZE 2000;

DECLARE

V\_NAME VIEW\_DEVICES.NAME%TYPE ;

V\_ID VIEW\_DEVICES.DEVICE\_ID%TYPE;

FUNCTION MAXFIND(V\_NAME IN VIEW\_DEVICES.NAME%TYPE)

RETURN VIEW\_DEVICES.DEVICE\_ID%TYPE

IS

M\_ID VARCHAR(10);

BEGIN

SELECT DEVICE\_ID INTO M\_ID

FROM VIEW\_DEVICES WHERE NAME=V\_NAME;

RETURN M\_ID;

END;

BEGIN

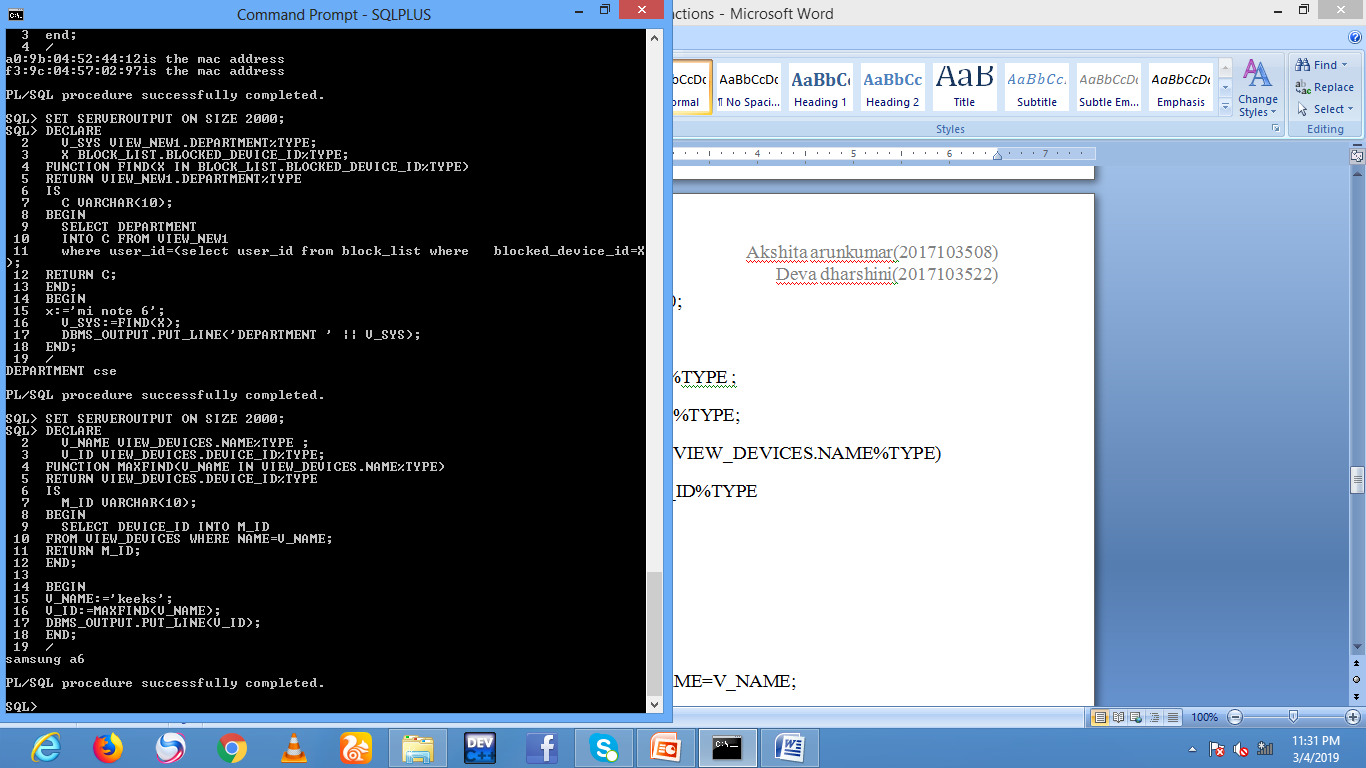
V\_NAME:='keeks';

V\_ID:=MAXFIND(V\_NAME);

DBMS\_OUTPUT.PUT\_LINE(V\_ID);

END;

/



**3.Display the email where the device id "192.168.39.144" is connected.**

create or replace function findid

return administrator.email\_id%type

is

v\_mail administrator.email\_id%type;

begin

select email\_id into v\_mail from administrator

where name=(select name from laptop\_router

where user\_id=(select user\_id from devices

where ip\_address='192.168.39.144'));

return v\_mail;

end;

/

declare

v\_id administrator.email\_id%type;

begin

v\_id := findid;

dbms\_output.put\_line(v\_id);

end;

/

**4.Which device has connected often?**

create or replace function finddevice

return devices.device\_id%type

is

v\_id devices.device\_id%type;

begin

select device\_ID into v\_id

from devices

where frequency=(select max(frequency) from devices);

return v\_id;

end;

/

declare

v\_id1 devices.device\_id%type;

begin

v\_id1 := finddevice;

dbms\_output.put\_line(v\_id1);

end;

/

