Section 1:

Q/A 1:

import math as m

import numpy as np

#array with values

a = [8.3,2.4,3.3,6.5]

floorValue = [];

ceilValue = [];

for i in range(len(a)):

resFloor = m.floor(a[i])

resCeil = m.ceil(a[i])

floorValue.append(resFloor)

ceilValue.append(resCeil)

#prints floor values

print("Floor of array: ",floorValue)

#prints ceil values

print("Ceil of array: ",ceilValue)

print(" ")

for i in range(len(a)):

print("Rint of Array",np.rint(a[i]))

=====================================================================================

Question2 :

def check\_palindrome(text):

text1 = []

text2 = []

non\_valid\_char = [" ",",",", ",".","''","''"]

for c in text:

if c in non\_valid\_char:

pass

else:

text1+=c

textLen = len(text)

while(textLen>0):

textLen-=1

if text[textLen] in non\_valid\_char:

pass

else:

text2+=text[textLen]

if text2==text1:

print("Text is a Palindrome")

else:

print("Text is not a Palindrome")

text = input("Enter text: ")

check\_palindrome(text)

output:

===================================================================================

Section 2:

Question1:

#created new file “permissions”

[g102\_user9@NDAUNIX priya]$ vi permissions.sh

hello my name is priya

[g102\_user9@NDAUNIX priya]$ chmod 654 permissions

================================================================================

Question 2:

echo "Enter Two numbers : "

read a

read b

#now enter your choice of operations

echo "Enter your Choice :"

echo "1. Addition"

echo "2. Subtraction"

echo "3. Muliiplication"

echo "4. Division"

#reads the number

read ch

# Switch Case to perform

# calulator operations

case $ch in

1)res=`echo $a + $b | bc`

;;

2)res=`echo $a - $b | bc`

;;

3)res=`echo $a \\* $b | bc`

;;

4)res=`echo "scale=2; $a / $b" | bc`

;;

esac

#prints result

echo "Result : $res"

====================================================================================

Section 4:

Question 1:

//creating new class “position”

**public** **class** Position{

**public** **static** **void** main(String[] args)

{

String pos = "The quick brown fox jumps over the lazy dog.";

String specpos = pos.substring(10,26);

System.***out***.println("The Old String is: "+pos);

System.***out***.println("The substring of a given string between two specified positions is: "+specpos);

}

}

====================================================================================

Section 3:

Question 1:

select first\_name, last\_name, substr(first\_name, 1,1) || substr(last\_name,1,7) as userid, salary from employees;

=================================================================================

Question 2:

select count(\*) as number\_of\_emp,to\_char(hire\_date,'YYYY') as year from employees group by to\_char(hire\_date, 'YYYY');

=================================================================================

Question 3:

select count(\*) as number\_of\_emp, job\_id from employees group by job\_id;

=================================================================================

Question4:

select min(salary),manager\_id from employees where manager\_id is not null having min(salary) > 6000 group by manager\_id order by min(salary) desc;

=================================================================================

Question 5:

SELECT FIRST\_NAME,LAST\_NAME,SALARY,DEPARTMENT\_ID FROM EMPLOYEES WHERE SALARY IN (SELECT(MIN(SALARY)) FROM EMPLOYEES GROUP BY DEPARTMENT\_ID);

=================================================================================

SECTION 3:

PLSQL:

QUESTION1:

declare

 Cursor c is select \* from employees where salary < 8000;

 emp employees%rowtype;

begin

 open c;

 loop

 fetch c into emp;

 exit when c%notfound;

 insert into newsal values(emp.emp\_id, emp.first\_name, emp.salary + 700);

 end loop;

end;

/

SET SERVEROUTPUT ON;

EXEC HIREDATE(7566)

=================================================================================

QUESTION 2:

declare

 PROCEDURE v\_proce is

 Cursor c is select \* from employees where salary < 8000;

 emp employees%rowtype;

 BEGIN

 open c;

 loop

 fetch c into emp;

 exit when c%notfound;

 insert into newsal values(emp.emp\_id, emp.first\_name, emp.salary + 700);

 end loop;

 END;

begin

 v\_proce();

end;

/