

1) Write a PL/SQL code to accept the text and reverse the given text. Check the Text is palindrome or not.

PROGRAM CODE:

DECLARE

a VARCHAR(15):='AMMA';

b VARCHAR(15);

n NUMBER;

BEGIN

n:=LENGTH(a);

FOR i IN REVERSE 1..n

LOOP

b:=b || SUBSTR(a,i,1);

END LOOP;

DBMS_OUTPUT.PUT_LINE('Reversed String'||b);

n:=INSTR(a,b);

IF n!=1 THEN

DBMS_OUTPUT.PUT_LINE(b ||'is not a palindrome');

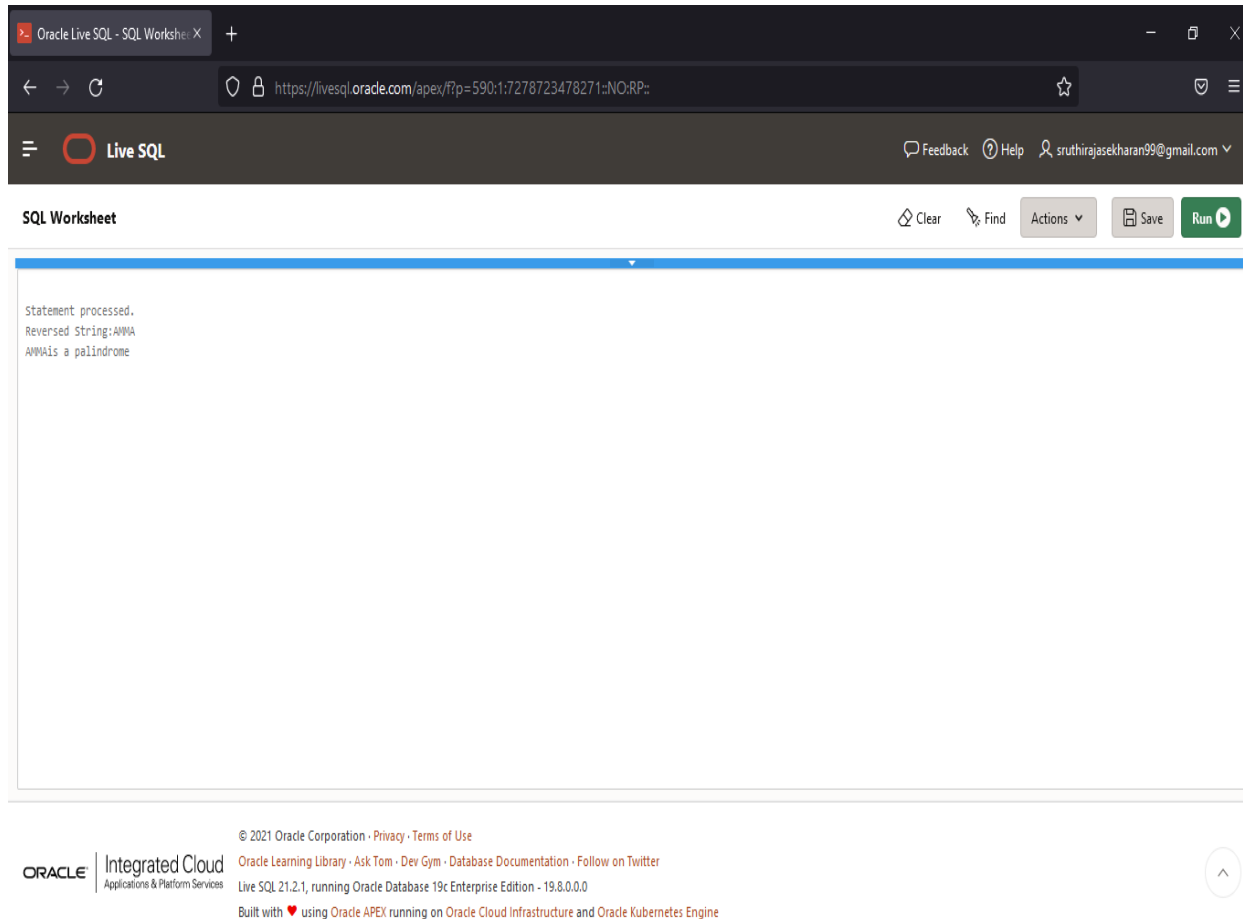
ELSE

DBMS_OUTPUT.PUT_LINE(b ||'is a palindrome');

END IF;

END;

OUTPUT



The screenshot shows the Oracle Live SQL web interface. The browser tab is titled "Oracle Live SQL - SQL Worksheet". The address bar shows the URL "https://livesql.oracle.com/apex/?p=590:1:7278723478271:NO:RP:". The page header includes the "Live SQL" logo, a "Feedback" link, a "Help" link, and a user profile "sruthirajasekharan99@gmail.com". The main content area is titled "SQL Worksheet" and contains a toolbar with "Clear", "Find", "Actions", "Save", and "Run" buttons. The output area displays the following text:

```
Statement processed.  
Reversed String:AWMA  
AWMA is a palindrome
```

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2) Write a program to read two numbers; If the first no > 2nd no, then swap the Numbers; if the first number is an odd number, then find its cube; if first no < 2nd no then raise it to its power; if both the numbers are equal, then find its Sqrt.

PROGRAMCODE

DECLARE

a INTEGER:=3;

b INTEGER:=2;

temp INTEGER:=0;

c INTEGER;

cube INTEGER;

BEGIN

IF a > b THEN

temp:=a;

a:=b;

b:=temp;

DBMS_OUTPUT.PUT_LINE('After swapping the a value is '||a ||' and b value is '||b);

IF MOD(b,2) !=0 THEN

cube:=a * a * a;

DBMS_OUTPUT.PUT_LINE('Cube is :'||cube);

ELSE

DBMS_OUTPUT.PUT_LINE('first number is even');

```
END IF;  
  ELSIF a < b THEN  
c:=a **b;  
DBMS_OUTPUT.PUT_LINE('Power is :'||c);  
  ELSIF a=b THEN  
DBMS_OUTPUT.PUT_LINE('Square root of a is :'||(SQRT(a)));  
DBMS_OUTPUT.PUT_LINE('Square root of b is :'||(SQRT(b)));  
END IF;  
END;
```

OUTPUT:

Oracle Live SQL - SQL Worksheet X

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☰ **Live SQL**

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SQL Worksheet

🗑️ Clear 🔍 Find ⌵ Actions

💾 Save

Run

Statement processed.
After swapping the a value is 2 and b value is 3
Cube is :8



3) Write a program to generate first 10 terms of the Fibonacci series

PROGRAM CODE:

DECLARE

a NUMBER:=0;

b NUMBER:=1;

c NUMBER;

BEGIN

DBMS_OUTPUT.PUT(a|| ' ' ||b|| ' ');

FOR i IN 3.. 10

LOOP

c:=a+b;

DBMS_OUTPUT.PUT(c||' ');

a:=b;

b:=c;

END LOOP;

DBMS_OUTPUT.PUT_LINE(' ');

END;

OUTPUT:

The screenshot displays the Oracle Live SQL web application. The browser's address bar shows the URL `https://livesql.oracle.com/apex/?p=590:1:7278723478271::NO:RP::`. The page title is "SQL Worksheet". The main content area shows the output of a query: "Statement processed." followed by a table of numbers: 0 1 1 2 3 5 8 13 21 34. The footer contains the Oracle logo, "Integrated Cloud Applications & Platform Services", and copyright information for 2021 Oracle Corporation.

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SQL Worksheet Clear Find Actions Save Run

Statement processed.
0 1 1 2 3 5 8 13 21 34

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4) Write a PL/SQL program to find the salary of an employee in the EMP table (Get the empno from the user). Find the employee drawing minimum salary. If the minimum salary is less than 7500, then give an increment of 15%. Also create an emp %rowtype record. Accept the empno from the user, and display all the information about the employee

PROGRAM CODE

```
create table employee(emp_no int,emp_name varchar(20),emp_post  
varchar(20),emp_salary decimal(10,2));  
insert into employee values(100,'Ammu','Sales',7000);
```

```
insert into employee values(101,'Rahul','Manager',50000);
```

```
insert into employee values(102,'Appu','Accountant',15000);
```

```
insert into employee values(103,'Sreekutty','HR',30000);
```

```
insert into employee values(104,'Anju','Accountant',15000);
```

Declare

```
empno employee.emp_no%type;  
salary employee.emp_salary%type;  
emp_rec employee%rowtype;  
begin
```



```
empno:=101;
select emp_salary into salary from employee where emp_no=empno;
if salary<7500 then
update employee set emp_salary=emp_salary * 15/100 where
emp_no=empno;
else
dbms_output.put_line('No more increment');
end if;
select * into emp_rec from employee where emp_no=empno;
dbms_output.put_line('Employee num: ' || emp_rec.emp_no);
dbms_output.put_line('Employee name: ' || emp_rec.emp_name);
dbms_output.put_line('Employee post: ' || emp_rec.emp_post);
dbms_output.put_line('Employee salary: ' || emp_rec.emp_salary);
end
```

OUTPUT:

Oracle Live SQL - SQL Worksheet

https://livesql.oracle.com/apex/?p=590:1:7278723478271:NO:RP::

Live SQL

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SQL Worksheet

Clear Find Actions Save Run

```
Table created.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

Statement processed.
No more increment.
Employee num: 101
Employee name: Rahul
Employee post: Manager
Employee salary: 50000
```

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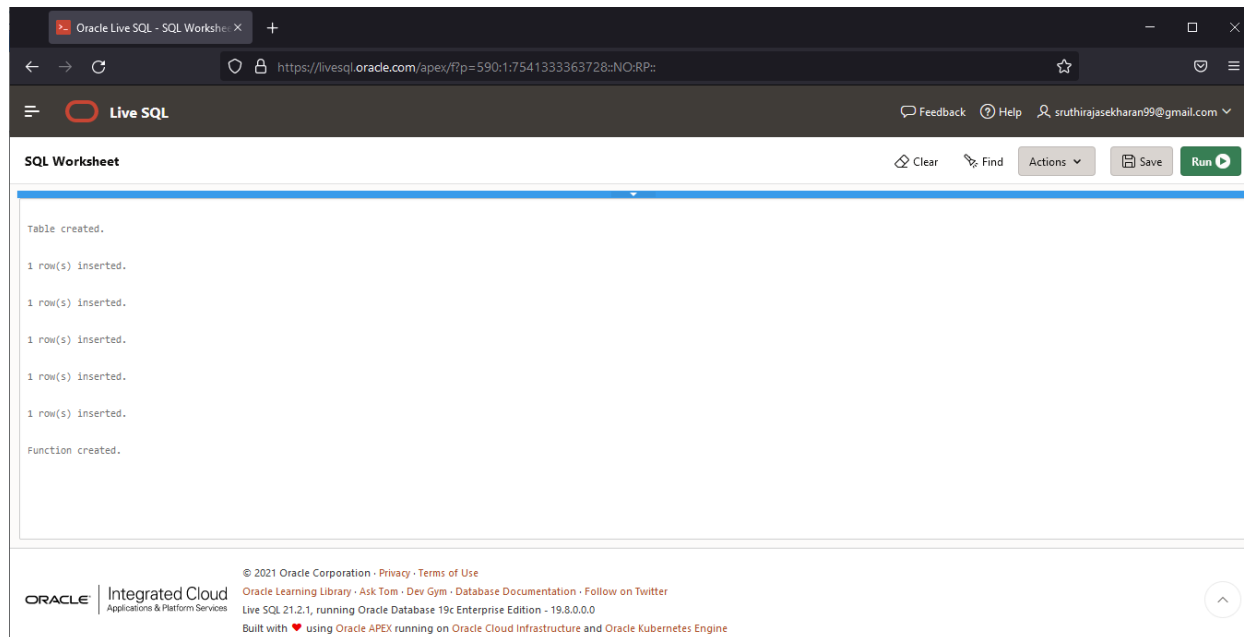
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5) Write a PL/SQL function to find the total strength of students present in different classes of the MCA department using the table Class(ClassId, ClassName, Strength

PROGRAM CODE:

```
create table class(class_id int,class_name varchar(20),class_strength int);
insert into class values(100,'MCA',60);
insert into class values(101,'BCA',30);
insert into class values(102,'MCA',30);
insert into class values(103,'BCA',30);
insert into class values(104,'MCA',60);
CREATE OR REPLACE FUNCTION total_strength
RETURN NUMBER IS
total NUMBER(5):=0;
BEGIN
SELECT sum(class_strength) INTO total FROM class WHERE
class_name='MCA';
RETURN total;
END;
DECLARE
c NUMBER(5);
BEGIN
c:=total_strength();
DBMS_OUTPUT.PUT_LINE('Total students in MCA department is:' || c);
END;
```

OUTPUT:



The screenshot displays the Oracle Live SQL web interface. The browser's address bar shows the URL `https://livesql.oracle.com/apex/f?p=590:1:7541333363728::NO:RP::`. The page header includes the "Live SQL" logo, a "Feedback" link, a "Help" icon, and a user profile for "sruthirajasekharan99@gmail.com".

The main content area is titled "SQL Worksheet" and contains the following output from executed SQL commands:

```
Table created.  
  
1 row(s) inserted.  
  
1 row(s) inserted.  
  
1 row(s) inserted.  
  
1 row(s) inserted.  
  
1 row(s) inserted.  
  
Function created.
```

At the bottom of the page, the Oracle logo is displayed alongside the "Integrated Cloud" branding. The footer text includes: "© 2021 Oracle Corporation - Privacy - Terms of Use", "Oracle Learning Library - Ask Tom - Dev Gym - Database Documentation - Follow on Twitter", "Live SQL 21.2.1, running Oracle Database 19c Enterprise Edition - 19.8.0.0.0", and "Built with ❤️ using Oracle APEX running on Oracle Cloud Infrastructure and Oracle Kubernetes Engine".

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☰  Live SQL


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SQL Worksheet


 Clear  Find

Actions ▼

 Save

Run 

Statement processed.
Total students in MCA department is:150

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