

PROCEDURES

1) Create Procedures to calculate area of Triangle, Rectangle and circle. Use case..when statements to call the procedures as per the choice of the user

1. Procedure TriangleArea

```
SQL> create or replace procedure TriangleArea(b in number,h in number)
  2  as
  3  c number(10,2);
  4  begin
  5  c:=0.5*b*h;
  6  dbms_output.put_line('Area of Triangle is '||c);
  7  end;
  8  /
```

Procedure created.

```
SQL> exec TriangleArea(3,4);
Area of Triangle is 6
```

2. procedure RectangleArea

```
SQL> create or replace procedure RectangleArea(l in number,b in number)
  2  as
  3  area number(10,2);
  4  begin
  5  area:=l*b;
  6  dbms_output.put_line('Area of Rectangle is' ||area);
  7  end;
  8  /
```

Procedure created.

```
SQL> exec RectangleArea(22,33);
Area of Rectangle is726
```

PL/SQL procedure successfully completed.

3. procedure CircleArea

```
SQL> create or replace procedure CircleArea(r in number)
  2  as
  3  area number(10,2);
  4  begin
  5  area:=3.14*r*r;
  6  dbms_output.put_line('Area of circle :'||area);
  7  end;
  8  /
```

Procedure created.

```
SQL> exec CircleArea(6);
Area of circle :113.04
```

PL/SQL procedure successfully completed.

4. calling procedures by taking input from user

```
SQL> declare
  2 choice char(10);
  3 begin
  4 choice:='&choice';
  5 case choice
  6 when 'Triangle' then
  7 TriangleArea(4,5);
  8 when 'Rectangle' then
  9 RectangleArea(3,6);
 10 when 'Circle' then
 11 CircleArea(5);
 12 else
 13 dbms_output.put_line('Invalid option');
 14 end case;
 15 end;
 16 /
Enter value for choice: Triangle
old  4: choice:='&choice';
new  4: choice:='Triangle';
Area of Triangle is 10

PL/SQL procedure successfully completed.
```

Q.2 a procedure to show contact inf by taking input from user

ERROR WOULD BE SEEN THROUGH SHOW ERRORS;

```

      *
ERROR at line 1:
ORA-06550: line 1, column 7:
PLS-00905: object SYSTEM.OUTPUT_CONTACT is invalid
ORA-06550: line 1, column 7:
PL/SQL: Statement ignored

SQL> create or replace procedure output_contact(cont number)
  2 is
  3 cont contact%rowtype;
  4 begin
  5 select * from contact into cont where cont_id=con_id;
  6 dbms_output.put_lint(cont.first_name||' '||cont.last_name||' '||cont.contact);
  7 end;
  8 /

Warning: Procedure created with compilation errors.

SQL> SHOW ERRORS;
Errors for PROCEDURE OUTPUT_CONTACT:

LINE/COL ERROR
-----
5/1       PL/SQL: SQL Statement ignored
5/23      PL/SQL: ORA-00933: SQL command not properly ended
SQL> |
```

```

SQL> create or replace procedure output_contact(c_ID number)
2 is
3   cont contact%rowtype;
4   begin
5     select * into cont FROM contact where cont_id=c_ID;
6     dbms_output.put_line(cont.first_name||' '||cont.last_name||' '||cont.contact);
7   end;
8   /

```

Procedure created.

```

SQL> exec output_contact(10)
manideep   iyer          9987654333

```

PL/SQL procedure successfully completed.

2. b create a procedure to insert values in table

```

SQL> Create table usser
2 (
3   id number(3),
4   name char(10)
5 );

```

Table created.

```

SQL> create or replace procedure INSERTUSER
2 (id IN NUMBER,
3  name IN VARCHAR2)
4 is
5   begin
6     insert into usser values(id,name);
7   end;
8   /

```

Procedure created.

```

SQL> BEGIN
2   insert into usser values(101,'Rahul');
3   dbms_output.put_line('record inserted successfully');
4   END;
5   /

```

record inserted successfully

PL/SQL procedure successfully completed.

```

SQL> /
record inserted successfully

```

PL/SQL procedure successfully completed.

```

SQL> select*from usser;

```

ID	NAME
101	Rahul
101	Rahul

Functions

```
SQL> CREATE OR REPLACE FUNCTION mysquare(s number)
  2  return number
  3  as
  4  area number(10);
  5  BEGIN
  6  area:= s*s;
  7  return area;
  8  END;
  9  /
```

Function created.

```
SQL> DECLARE
  2  a number(3):= &a;
  3
  4  area number(10);
  5  BEGIN
  6  area:=square(a);
  7  dbms_output.put_line('area of square='||area);
  8  END;
  9  /
```

Enter value for a: 3

old 2: a number(3):= &a;

new 2: a number(3):= 3;

area of square=9

PL/SQL procedure successfully completed.