CSE2007 (DBMS) Lab-11

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Q1] PL/SQL Program for Reverse of a Number

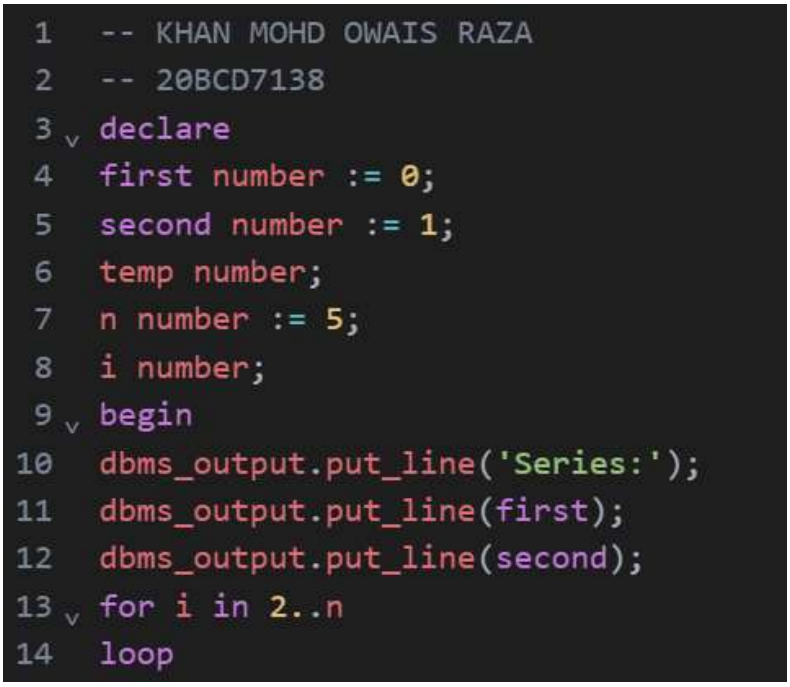
```
-- KHAN MOHD OWAIS RAZA
-- 20BCD7138
SET SERVEROUTPUT ON
DECLARE
  num NUMBER := 12345;
  reversed_num NUMBER := 0;
  remainder NUMBER;
BEGIN
  DBMS_OUTPUT.ENABLE(NULL);
  WHILE num > 0 LOOP
    remainder := num MOD 10;
    reversed_num := (reversed_num * 10) + remainder;
    num := TRUNC(num / 10);
  END LOOP;
  DBMS_OUTPUT.PUT_LINE('The reversed number is: ' ||
reversed_num);
END;
/
```

```
1   -- KHAN MOHD OWAIS RAZA
2   -- 20BCD7138
3   SET SERVEROUTPUT ON
4   DECLARE
5     num NUMBER := 12345;
6     reversed_num NUMBER := 0;
7     remainder NUMBER;
8   BEGIN
9     DBMS_OUTPUT.ENABLE(NULL);
10    WHILE num > 0 LOOP
11      remainder := num MOD 10;
12      reversed_num := (reversed_num * 10) + remainder;
13      num := TRUNC(num / 10);
14    END LOOP;
15    DBMS_OUTPUT.PUT_LINE('The reversed number is: ' || reversed_num);
16  END;
17  /
```

```
Statement processed.
The reversed number is: 54321
```

Q2] PL/SQL Program for Fibonacci Series

```
-- KHAN MOHD OWAIS RAZA
-- 20BCD7138
declare
first number := 0;
second number := 1;
temp number;
n number := 5;
i number;
begin
     dbms_output.put_line('Series:');
     dbms_output.put_line(first);
     dbms_output.put_line(second);
     for i in 2..n
     loop
          temp:=first+second;
first := second;
second := temp;
     dbms_output.put_line(temp);
end loop;
end;
```



```
Statement processed.
Series:
0
1
1
2
3
5
```

Q3] PL/SQL procedure to check whether a given number is odd or even

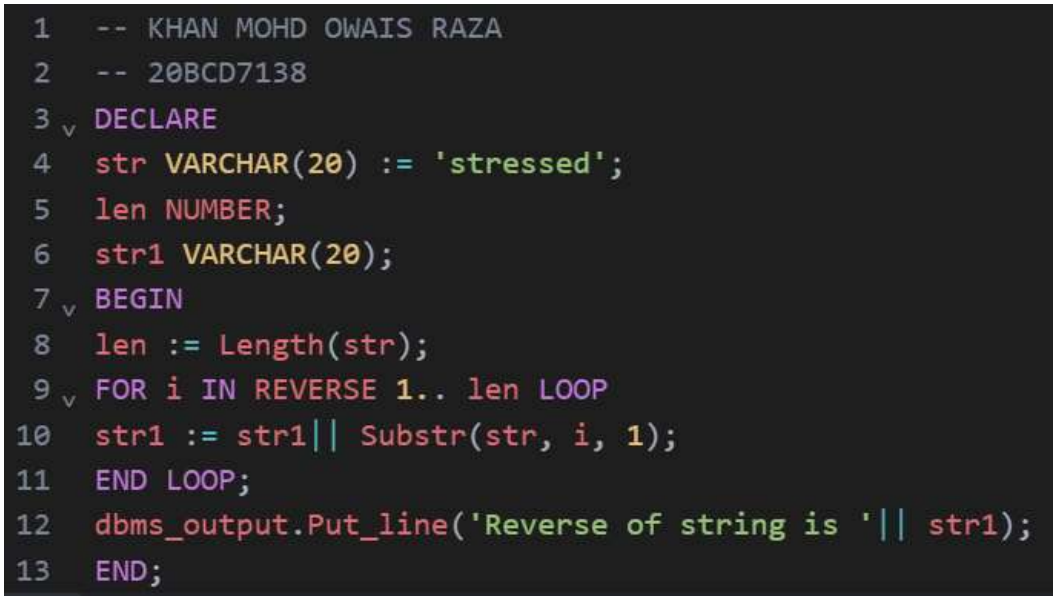
```
-- KHAN MOHD OWAIS RAZA
-- 20BCD7138
DECLARE
     n NUMBER := 1634;
     r NUMBER;
BEGIN
     r := MOD(n, 2);
     IF r = 0 THEN
     dbms_output.Put_line('Even');
     ELSE
     dbms_output.Put_line('Odd');
     END IF;
END;
```

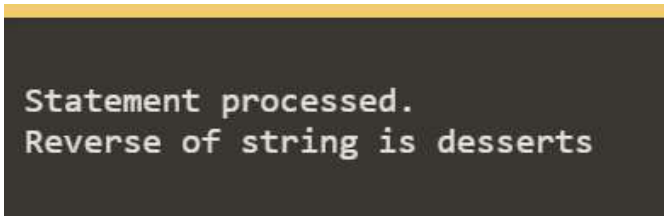
```
1   -- KHAN MOHD OWAIS RAZA
2   -- 20BCD7138
3   DECLARE
4        n NUMBER := 1634;
5        r NUMBER;
6   BEGIN
7        r := MOD(n, 2);
8        IF r = 0 THEN
9        dbms_output.Put_line('Even');
10       ELSE
11       dbms_output.Put_line('Odd');
12       END IF;
13  END;
14
```

```
Statement processed.
Even
```

Q5] PL/SQL Function to Reverse a String

```
-- KHAN MOHD OWAIS RAZA
-- 20BCD7138
DECLARE
str VARCHAR(20) := 'stressed';
len NUMBER;
str1 VARCHAR(20);
BEGIN
len := Length(str);
FOR i IN REVERSE 1.. len LOOP
str1 := str1|| Substr(str, i, 1);
END LOOP;
dbms_output.Put_line('Reverse of string is '|| str1);
END;
```





Q4] PL/SQL program to retrieve the employees working in DNO=5 and increase their salary by 10%

```
-- KHAN MOHD OWAIS RAZA
-- 20BCD7138
DROP TABLE emp_temp;
CREATE TABLE emp_temp AS
  SELECT *
  FROM employees;
DECLARE
  CURSOR employees_cur IS
    SELECT employee_id,
           first_name,
           Trunc(Months_between(SYSDATE,hire_date) / 12)
expr
    FROM   emp_temp;
incre_per NUMBER(2);
BEGIN
  dbms_output.put_line(rpad('Employee
ID',15)||rpad('Name',25) || 'Increment %');
dbms_output.Put_line('-------------------------------------
---------------------');
  FOR store_emp_rec IN employees_cur
  LOOP
    incre_per :=
    CASE
    WHEN store_emp_rec.expr > 10 THEN
      15
    WHEN store_emp_rec.expr > 5 THEN
      10
    ELSE
      8
    END;
    UPDATE emp_temp
    SET    salary = salary + (salary * incre_per / 100)
    WHERE  employee_id = store_emp_rec.employee_id;
dbms_output.put_line(rpad(store_emp_rec.employee_id,15)
||rpad(store_emp_rec.first_name,25)||  incre_per );
  END LOOP;
```

```
END;
/
```

```
Statement processed.
SQL> /
Employee ID    Name                          Increment %
-------------------------------------------------------
100            Steven                        15
101            Neena                         15
102            Lex                           15
103            Alexander                     15
104            Bruce                         10
105            David                         15
106            Valli                         15
107            Diana                         15
108            Nancy                         15
109            Daniel                        15
110            John                          15
111            Ismael                        15
112            Jose Manuel                   15
113            Luis                          10
114            Den                           15
```