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Batch - 3ENC1

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PL/SQL Lab Assignments-2

1. WAP to check whether number is odd or even.

```
1 DECLARE
2 num NUMBER:=123;
3 BEGIN
4 IF MOD(num,2)=0
5 THEN
6 dbms_output.put_line('Even');
ELSE
8 dbms_output.put_line('Odd');
9 END IF;
10 END;

Statement processed.
Odd
```

2. WAP to find out the Fibonacci series

```
DECLARE
      a NUMBER := 0;
b NUMBER := 1;
      temp NUMBER;
n NUMBER := 7;
i NUMBER;
      BEGIN
 8
          dbms_output.put_line('Fibonacci series:');
          dbms_output.put_line(a);
dbms_output.put_line(b);
 9
10
          FOR i in 2..n
LOOP
11
12
              temp:= a + b;
13
              a := b;
b := temp;
14
15
              dbms_output.put_line(temp);
16
          END LOOP;
17
      END;
18
```

```
Statement processed.
Fibonacci series:
0
1
2
3
5
8
```

3. WAP to reverse a string

```
DECLARE
 1
 2
        str
             VARCHAR(6) := 'RanDom';
 3
        len NUMBER;
 4
        str1 VARCHAR(20);
 5
    BEGIN
 6
        len := Length(str);
 7
        FOR i IN REVERSE 1.. len LOOP
             str1 := str1 || Substr(str, i, 1);
 8
9
        END LOOP:
10
        dbms_output.Put_line('Reverse of string is :'|| str1);
11
    END:
```

```
Statement processed.
Reverse of string is :moDnaR
```

4. WAP to check whether a number is a prime number or not?

```
DECLARE
1
2
    n NUMBER:
3
     i NUMBER;
4
    temp NUMBER;
5
6
    BEGIN
7
    n := 71;
    i := 2;
8
9
    temp := 1;
10
      FOR i in 2..n/2
11
        L00P
12
             IF MOD(n, i) = 0
13
14
                 temp := 0;
15
                 EXIT:
16
             END IF;
        END LOOP;
17
18
19
         IF temp = 1
20
         THEN
             dbms_output.put_line('true');
21
22
         ELSE
             dbms_output.put_line('false');
23
24
         END IF;
25
    END:
```

```
Statement processed.
```

5. WAP to check a number is palindrome or not?

SQL Worksheet

```
1
    DECLARE
        n NUMBER;
2
3
         m NUMBER;
4
        rev NUMBER:=0;
 5
         г NUMBER;
 6
    BEGIN
7
        n:=3322112233;
8
         m:=n;
         WHILE n>0
9
10
         L00P
            r:=MOD(n,10);
11
12
            rev:=(rev*10)+r;
13
            n:=trunc(n/10);
14
         END LOOP;
15
16
         IF m=rev
17
         THEN
18
             dbms_output.put_line('number is palindrome');
19
             dbms_output.put_line('number is not palindrome');
20
21
         END IF;
22
    END:
```

```
Statement processed. number is palindrome
```

6. WAP to swap two Numbers

```
1
     DECLARE
 2
         a NUMBER;
 3
         b NUMBER;
 4
         temp NUMBER;
 5
 6
     BEGIN
 7
         a:=17;
8
         b:=23;
9
10
         temp:=a;
11
         a:=b;
12
         b:=temp;
         dbms_output.put_line('swapped values:');
13
         dbms_output_put_line('a='||a||'b='||b);
14
15
     END;
```

```
Statement processed.
swapped values:
a=23 b=17
```

7. Create a table Test with columns C1 and C2 as

C1	C2
2	4
1	3

WAP to fetch the second row (C1=1) from the Table Test. Further, insert a new row having (C1, C2) = (13, 15)into the same table if the value of C2=3, else insert (C1, C2) = (12, 11).

```
CREATE TABLE TestTable(
       C1 INT,
C2 INT);
       INSERT INTO TestTable VALUES (2,4);
INSERT INTO TestTable VALUES (1,3);
       SELECT*FROM TestTable;
       DECLARE
   8
       CUTSOF CUF
       SELECT*FROM TestTable WHERE C1=1;
  10
  11
  12
       num1 INT;
  13
       num2 INT;
  14
       BEGIN
  15
       OPEN cur:
  16
  17
        FETCH cur INTO num1, num2;
       dbms_output.put_line('Row :'||num1||','||num2);
  18
       IF(num2=3) THEN
INSERT INTO TestTable VALUES(13,15);
  19
  20
  21
22
        ELSE
        INSERT INTO TestTable VALUES(12,11);
  23
       END IF:
  24
       close cur;
  26
       SELECT*FROM TestTable;
 C1
       C2
 2
 1
Download CSV
```

```
DECLARE
8
     cursor cur
9
     IS
10
     SELECT*FROM TestTable
11
     WHERE C1=1;
12
     num1 INT;
13
     num2 INT;
14
     BEGIN
15
     OPEN cur;
16
17
     FETCH cur INTO num1, num2;
     dbms_output.put_line('Row :'||num1||',
18
19
     IF(num2=3) THEN
     INSERT INTO TestTable VALUES(13,15);
20
21
     INSERT INTO TestTable VALUES(12,11);
22
23
     END IF:
24
     close cur;
25
     END:
26
     SELECT*FROM TestTable;
```

C1	C2		
2	4		
1	3		
13	15		
12	11		
Download CSV			
4 rows selected.			

8. WAP to insert records from one table (EMP1) to another (EMP2).

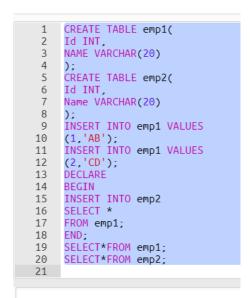
EMP1

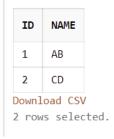
EMP)

Id	Name
1	AB
2	CD

Id	Name

SQL Worksheet





9. WAP to check whether a given character is letter or digit

SQL Worksheet

```
DECLARE
 1
 2
          get_ctr CHAR(1) := 'T';
 3
     BEGIN
 4
          IF ( get_ctr >= 'A'
               AND get_ctr <= 'Z' )
 5
              OR ( get_ctr >= 'a'
AND get_ctr <= 'z' ) THEN
 6
            dbms_output.Put_line ('The given character is a letter');
 8
 9
          ELSE
            dbms_output.Put_line ('The given character is not a letter');
IF get_ctr BETWEEN '0' AND '9' THEN
10
11
               dbms_output.Put_line ('The given character is a number');
12
13
14
               dbms_output.Put_line ('The given character is not a number');
            END IF;
15
          END IF;
16
17 END;
```

Statement processed.

The given character is a letter