DBMS Assignment 2

Dharmit Shah SYIT 330

1. Create a procedure to read a character and print whether it is a vowel or not.

```
SQL> create procedure vowel(ch in out char)
  2  as
  3  begin
  4  case ch
  5  when 'a' then dbms_output.put_line('vowel');
  6  when 'A' then dbms_output.put_line('vowel');
  7  when 'e' then dbms_output.put_line('vowel');
  8  when 'E' then dbms_output.put_line('vowel');
  9  when 'i' then dbms_output.put_line('vowel');
 10  when 'I' then dbms_output.put_line('vowel');
 11  when 'o' then dbms_output.put_line('vowel');
 12  when 'O' then dbms_output.put_line('vowel');
 13  when 'u' then dbms_output.put_line('vowel');
 14  when 'U' then dbms_output.put_line('vowel');
 15  else dbms_output.put_line('Not a vowel');
 16  end case;
 17  end;
 18  /

Procedure created.

SQL> declare
  2  ch char := '&ch';
  3  begin
  4  vowel(ch);
  5  end;
  6  /
Enter value for ch: D
old   2: ch char := '&ch';
new   2: ch char := 'D';
Not a vowel

PL/SQL procedure successfully completed.
```

2. Create a block to print the numbers from 1 to 10 using FOR Loop.

```
SQL> declare
  2  i int;
  3  begin
  4  for i in 1..10 loop
  5  dbms_output.put_line(i);
  6  end loop;
  7  end;
  8  /
1
2
3
4
5
6
7
8
9
10

PL/SQL procedure successfully completed.
```

3. Create a function to print the total number of employees working as ‘CLERK’.

```
create function t_emp
return int
as
c int;
begin
select count(*) into c from emp_dharmit where job='CLERK';
return c;
end;
/
```

Results Explain Describe Saved SQL History

```
Function created.
```

```
select t_emp from dual;
```

Results Explain Describe Saved SQL History

T_EMP
4

4. Create a block to print even numbers from 2 to 20 and terminate the loop using EXIT statement.

```
SQL> declare
  2  i int := 0;
  3  begin
  4  loop
  5  i := i + 2;
  6  dbms_output.put_line(i);
  7  exit when i=20;
  8  end loop;
  9  end;
 10  /
2
4
6
8
10
12
14
16
18
20

PL/SQL procedure successfully completed.
```

5. Explain the significance of replace keyword with example.

Ans: It is used to change the definition of existing object.

```
SQL> create or replace function func_d
  2  return int
  3  as
  4  a int := &a;
  5  b int := &b;
  6  c int;
  7  begin
  8  c := a + b;
  9  return c;
 10  end;
 11  /
Enter value for a: 16
old   4: a int := &a;
new   4: a int := 16;
Enter value for b: 14
old   5: b int := &b;
new   5: b int := 14;

Function created.

SQL> select func_d from dual;

    FUNC_D
----------
        30
```

```
SQL> create or replace function func_d
  2  return int
  3  as
  4  a int := &a;
  5  b int := &b;
  6  c int;
  7  begin
  8  c := a * b;
  9  return c;
 10
 11  end;
 12  /
Enter value for a: 5
old   4: a int := &a;
new   4: a int := 5;
Enter value for b: 5
old   5: b int := &b;
new   5: b int := 5;

Function created.

SQL> select func_d from dual;

    FUNC_D
----------
        25
```

If we don’t use replace keyword then error will occur