PL*SQL

Exercise 1

1. Write a program that computes the perimeter and the area of a rectangle. Define your own values for the length and width. (Assuming that *L* and *W* are the length and width of the rectangle, Perimeter = *2*(L+W)* and Area = *L*W*. Display the output on the screen using dbms_output.put_line.

```
declare
v_l number:=8;
v_b number:=5;
v_a number;
v_p number;
begin
v_p:=2*(v_l+v_b);
v_a:=v_l*v_b;
dbms_output.put_line('perimeter of rectangle is ' || v_p);
dbms_output.put_line('area of rectangle is ' || v_a);
end;
```

2. Write a program that declares an integer variable called *num*, assigns a value to it, and computes and inserts into the tempp table the value of the variable itself, its square, and its cube.

```
declare
v_n number:=3;
v_c number;
v_s number;
begin
v_s:=power(v_n,2);
v_c:=power(v_n,3);
dbms_output.put_line('perimeter of rectangle is ' || v_s);
dbms_output.put_line('area of rectangle is ' || v_c);
insert into tempp_227 values(v_n,v_s,v_c);
end;
```

3. Convert a temperature in Fahrenheit (F) to its equivalent in Celsius (C) and vice versa. The required formulae are:-
   C= (*F*-32)*5/9
   F= 9/5**C* + 32
   Display the output on the screen using dbms_output.put_line. Data has to be input by the user.

```
declare

v_c number;

v_f number;

begin

v_c:=(:v_c);

v_f:= (9/5)*(v_c)+32;

v_c:= (v_f-32)*(5/9);

dbms_output.put_line('Temperature In Farenhieght' || v_f);

dbms_output.put_line('Temperature In Celsius ' || v_c);

end;
```

4. Convert a number of inches into yards, feet, and inches. For example, 124 inches equals 3 yards, 1 foot, and 4 inches. Display the output on the screen using dbms_output.put_line. Data has to be input by the user.

```
declare
v_i number(10,0);
v_i_1 number(10,0);
v_y number(10,0);
v_f number(10,0);
v_temp varchar2(20);
v_temp1 number(10,0);
begin
v_i:=(:v_i);
v_i_1:=MOD(v_i,12);
v_f:=v_i/12;
v_y:=v_f/3;
v_f:=MOD(v_i,3);
dbms_output.put_line(v_y||' Yard '||v_f||' Feet '||v_i_1||' Inches ');
end;
```

5. Write a program that enables a user to input an integer. The program should then state whether the integer is evenly divisible by 5. (Use decode instead of IF statement where required). Display the output on the screen using dbms_output.put_line. Data has to be input by the user.

```
declare
```

```
v_n number(10,0);
v_temp varchar2(20);
v_temp1 number(10,0);
begin
v_n:=(:v_n);
v_temp1:=MOD(v_n,5);
select decode(v_temp1, 0,'Divisible By 5','Not Divisible By 5') into v_temp from
dual;
dbms_output.put_line(v_temp);
end;
```

6. Your block should read in two real numbers and tell whether the product of the two numbers is equal to or greater than 100. Display the output on the screen using dbms_output.put_line. (Use decode instead of IF statement where required). Data has to be input by the user.

```
declare
v_n number(10,0);
v_n1 number(10,0);
v_temp varchar2(20);
v_temp1 number(10,0);
begin
v_n:=(:v_n);
v_n1:=(:v_n1);
v_temp1:=(v_n*v_n1)/100;
select decode(v_temp1, 0,'Less Than 100',1,'Equal To 100','Greater Than 100')
into v_temp from dual;
dbms_output.put_line(v_temp);
end;
```