PLSQL Advanced part 3

Connected to:

Oracle Database 10g Enterprise Edition Release 10.2.0.1.0 - Production

With the Partitioning, OLAP and Data Mining options

SQL> create table customers(id int not null,

2 name varchar(20) not null,

3 age int not null,

4 address char(25),

5 salary decimal(18,2),

6 primary key(id));

Table created.

SQL> insert into customers(id,name,age,address,salary)values(1,'Rahul',25,'Dehli'

1 row created.

SQL> insert into customers(id,name,age,address,salary)values(2,'Mohit',25,'Ahmeda

1 row created.

SQL> insert into customers(id,name,age,address,salary)values(3,'Sonali',23,'Kotta

1 row created.

SQL> select \* from customers;

ID NAME AGE ADDRESS SALARY

---------- -------------------- ---------- ------------------------- ----------

1 Rahul 25 Dehli 1500

2 Mohit 25 Ahmedabbad 2000

3 Sonali 23 Kotta 2000

SQL> declare

2 c\_id customers.id%type:=1;

3 c\_name customers.name%type;

4 c\_addr customers.address%type;

5 c\_sal customers.salary%type;

6 begin

7 select name,address,salary into c\_name,c\_addr,c\_sal from customers

8 where id=c\_id;

9 dbms\_output.put\_line('Customer'||c\_name||'from'||c\_addr||'earns'||c\_sal);

10 end;

11 /

PL/SQL procedure successfully completed.

SQL> set serveroutput on;

SQL> declare

2 c\_id customers.id%type:=1;

3 c\_name customers.name%type;

4 c\_addr customers.address%type;

5 c\_sal customers.salary%type;

6 begin

7 select name,address,salary into c\_name,c\_addr,c\_sal from customers

8 where id=c\_id;

9 dbms\_output.put\_line('Customer'||c\_name||'from'||c\_addr||'earns'||c\_sal);

10 end;

11 /

CustomerRahulfromDehli earns1500

PL/SQL procedure successfully completed.

SQL> set serveroutput on

SQL> declare

2 pi constant number:=3.141592654;

3 radius number(5,2);

4 dia number(5,2);

5 circumference number(7,2);

6 area number(10,2);

7 begin

8 radius:=9.5;

9 dia:=radius\*2;

10 circumference:=2.0\*pi\*radius;

11 area:=pi\*radius\*radius;

12 dbms\_output.put\_line('Radius:'||radius);

13 dbms\_output.put\_line('Diameter:'||dia);

14 dbms\_output.put\_line('circumference:'||circumference);

15 dbms\_output.put\_line('Area:'||area);

16 end;

17 /

Radius:9.5

Diameter:19

circumference:59.69

Area:283.53

PL/SQL procedure successfully completed.

SQL> declare

2 message varchar2(30):='That"s bangontheory.com!';

3 begin

4 dbms\_output.put\_line(message);

5 end;

6 /

That"s bangontheory.com!

PL/SQL procedure successfully completed.

SQL> set serveroutput on

SQL> declare

2 c\_id customers.id%type:=2;

3 c\_name customers.name%type;

4 c\_addr customers.address%type;

5 c\_sal customers.salary%type;

6 begin

7 select name,address,salary into c\_name,c\_addr,c\_sal

8 from customers

9 where id=c\_id;

10 dbms\_output.put\_line('customers '||c\_name||'from '||c\_addr||'ear an amout of

11 end;

12 /

customers Mohitfrom Ahmedabbad ear an amout of2000

PL/SQL procedure successfully completed.

SQL> declare

2 c\_id customers.id%type:=2;

3 c\_name customers.name%type;

4 c\_addr customers.address%type;

5 c\_sal customers.salary%type;

6 begin

7 select name,address,salary into c\_name,c\_addr,c\_sal

8 from customers

9 where id=c\_id;

10 dbms\_output.put\_line('customers '||c\_name||' from '||c\_addr||' earn an a

end;

11 /

customers Mohit from Ahmedabbad earn an amount of 2000

PL/SQL procedure successfully completed.

SQL> declare

2 a integer;

3 c integer;

4 begin

5 if(a<=20) then

6 c:=c+1;

7 endif;

8 /

endif;

\*

ERROR at line 7:

ORA-06550: line 7, column 6:

PLS-00103: Encountered the symbol "end-of-file" when expecting one of the

following:

begin case declare else elsif end exit for goto if loop mod

null pragma raise return select update while with

<an identifier> <a double-quoted delimited-identifier>

<a bind variable> << close current delete fetch lock insert

open rollback savepoint set sql execute commit forall merge

pipe

SQL> declare

2 a integer;

3 c integer;

4 begin

5 if(a<=20) then

6 c:=c+1;

7 end if;

8 end;

9 /

PL/SQL procedure successfully completed.

SQL> begin

2 if color='red'

3 then

4 dbms\_output.put\_line('You have chosen a red car');

5 else

6 dbms\_output.put\_line('Please choose a color for your car');

7 end if;

8 end;

9 /

if color='red'

\*

ERROR at line 2:

ORA-06550: line 2, column 4:

PLS-00201: identifier 'COLOR' must be declared

ORA-06550: line 2, column 1:

PL/SQL: Statement ignored

SQL> declare

2 color varchar2(20);

3 begin

4 if color='red'

5 then

6 dbms\_output.put\_line('You have chosen a red car');

7 else

8 dbms\_output.put\_line('Please choose a color for your car');

9 end if;

10 end;

11 /

Please choose a color for your car

PL/SQL procedure successfully completed.

SQL> declare

2 a number(3):=100;

3 begin

4 if(a=10) then

5 dbms\_output.put\_line('Value of a is 10');

6 elsif(a=20)

7 then

8 dbms\_output.put\_line('value of a 20');

9 elsif(a=30) then

10 dbms\_output.put\_line('Value of a is 30');

11 else

12 dbms\_output.put\_line('None of the value is Matching');

13 end if;

14 dbms\_output.put\_line('Exact value of a is :'||a);

15 end;

16 /

None of the value is Matching

Exact value of a is :100

PL/SQL procedure successfully completed.

SQL> declare

2 grade char(1):='A';

3 begin

4 case grade

5 when 'A' then dbms\_output.put\_line('Excellent');

6 when 'B' then dbms\_output.put\_line('Very good');

7 when 'C' then dbms\_output.put\_line('Well done');

8 when 'D' then dbms\_output.put\_line('You Passed');

9 when 'E' then dbms\_output.put\_line('Better Try Again');

10 when 'F' then dbms\_output.put\_line('No Such Grade');

11 end case;

12 end;

13 /

Excellent

PL/SQL procedure successfully completed.

SQL> edit department

SQL> @depaetment;

SP2-0310: unable to open file "depaetment.sql"

SQL> set serveroutput on

SQL> @department

SP2-0042: unknown command "decalre" - rest of line ignored.

SP2-0734: unknown command beginning "department..." - rest of line ignored.

case department

\*

ERROR at line 2:

ORA-06550: line 2, column 6:

PLS-00201: identifier 'DEPARTMENT' must be declared

ORA-06550: line 2, column 1:

PL/SQL: Statement ignored

SQL> edit department

SQL> @department

Computer

PL/SQL procedure successfully completed.

SQL> edit department

SQL> @department

Computer

PL/SQL procedure successfully completed.

SQL> declare

2 department char(2):='CE';

3 begin

4 case

5 when department='EE' then dbms\_output.put\_line('Electical');

6 when department='ME' then dbms\_output.put\_line('Mechanical');

7 when department='MC' then dbms\_output.put\_line('Mechatronics');

8 when department='CE' then dbms\_output.put\_line('Computer ');

9 when department='GE' then dbms\_output.put\_line('Geographics ');

10 else dbms\_output.put\_line('No Such Departments ');

11 end case;

12 end;

13 /

Computer

PL/SQL procedure successfully completed.

SQL> edit department

SQL> @department

Value of a is 100 and b is 200

Exact Value of a is :100

Exact Value of b is :200

PL/SQL procedure successfully completed.

SQL> declare

2 a number(3):=100;

3 b number(3):=200;

4 begin

5 --check the boolean conditions

6 if(a=100) then

7 if(b=200) then

8 dbms\_output.put\_line('Value of a is 100 and b is 200');

9 end if;

10 end if;

11 dbms\_output.put\_line(' Exact Value of a is :'||a);

12 dbms\_output.put\_line(' Exact Value of b is :'||b);

13 end;

14 /

Value of a is 100 and b is 200

Exact Value of a is :100

Exact Value of b is :200

PL/SQL procedure successfully completed.

SQL>

SQL> edit department

SQL> @department

10

20

30

40

50

After Exit x is :60

PL/SQL procedure successfully completed.

SQL> edit department

SQL> @department

10

20

30

40

50

60

70

After Exit x is :80

PL/SQL procedure successfully completed.

SQL> declare

2 x number:=10;

3 begin

4 loop

5 dbms\_output.put\_line(x);

6 x:=x+10;

7 if x>70 then

8 exit;

9 end if;

10 end loop;

11 --after exit,control resumes here

12 dbms\_output.put\_line('After Exit x is :'||x);

13 end;

14 /

10

20

30

40

50

60

70

After Exit x is :80

PL/SQL procedure successfully completed.

SQL> edit department

SQL> @department

Value of a :10

Value of a :11

Value of a :12

Value of a :13

Value of a :14

Value of a :15

Value of a :16

Value of a :17

Value of a :18

Value of a :19

PL/SQL procedure successfully completed.

SQL> edit department

SQL> declare

2 a number(2):=10;

3 begin

4 while a<20

5 loop

6 dbms\_output.put\_line('Value of a :'||a);

7 a:=a+1;

8 end loop;

9 end;

10 /

Value of a :10

Value of a :11

Value of a :12

Value of a :13

Value of a :14

Value of a :15

Value of a :16

Value of a :17

Value of a :18

Value of a :19

PL/SQL procedure successfully completed.

SQL> declare

2 a number(2):=10;

3 begin

4 while a<20

5 loop

6 dbms\_output.put\_line('Value of a :'||a);

7 a:=a+1;

8 end loop;

9 end;

10 /

Value of a :10

Value of a :11

Value of a :12

Value of a :13

Value of a :14

Value of a :15

Value of a :16

Value of a :17

Value of a :18

Value of a :19

PL/SQL procedure successfully completed.

SQL> edit department

SQL> @departrment

SP2-0310: unable to open file "departrment.sql"

SQL> @department

Value of a :10

Value of a :13

Value of a :16

Value of a :19

Value of a :22

Value of a :25

Value of a :28

PL/SQL procedure successfully completed.

SQL> declare

2 a number(2):=10;

3 begin

4 while a<30

5 loop

6 dbms\_output.put\_line('Value of a :'||a);

7 a:=a+3;

8 end loop;

9 end;

10 /

Value of a :10

Value of a :13

Value of a :16

Value of a :19

Value of a :22

Value of a :25

Value of a :28

PL/SQL procedure successfully completed.

SQL> edit department

SQL> @department

value of a :10

value of a :11

value of a :12

value of a :13

value of a :14

value of a :15

value of a :16

value of a :17

value of a :18

value of a :19

value of a :20

PL/SQL procedure successfully completed.

SQL> declare

2 a number(2);

3 begin

4 for a in 10..20

5 loop

6 dbms\_output.put\_line('value of a :'||a);

7 end loop;

8 end;

9 /

value of a :10

value of a :11

value of a :12

value of a :13

value of a :14

value of a :15

value of a :16

value of a :17

value of a :18

value of a :19

value of a :20

PL/SQL procedure successfully completed.

SQL> edit department

SQL> @department

value of a :20

value of a :19

value of a :18

value of a :17

value of a :16

value of a :15

value of a :14

value of a :13

value of a :12

value of a :11

value of a :10

PL/SQL procedure successfully completed.

SQL> declare

2 a number(2);

3 begin

4 for a in reverse 10..20

5 loop

6 dbms\_output.put\_line('value of a :'||a);

7 end loop;

8 end;

9 /

value of a :20

value of a :19

value of a :18

value of a :17

value of a :16

value of a :15

value of a :14

value of a :13

value of a :12

value of a :11

value of a :10

PL/SQL procedure successfully completed.

SQL> edit department

SQL> @department

2is prime number

3is prime number

5is prime number

7is prime number

11is prime number

13is prime number

17is prime number

19is prime number

23is prime number

29is prime number

31is prime number

37is prime number

41is prime number

43is prime number

47is prime number

PL/SQL procedure successfully completed.

SQL> declare

2 i number(3);

3 j number(3);

4 begin

5 i:=2;

6 loop

7 j:=2;

8 loop

9 exit when((mod(i,j)=0) or (j=i));

10 j:=j+1;

11 end loop;

12 if(j=i) then

13 dbms\_output.put\_line(i || ' is prime number ');

14 end if;

15 i:=i+1;

16 exit when i=50;

17 end loop;

18 end;

19 /

2 is prime number

3 is prime number

5 is prime number

7 is prime number

11 is prime number

13 is prime number

17 is prime number

19 is prime number

23 is prime number

29 is prime number

31 is prime number

37 is prime number

41 is prime number

43 is prime number

47 is prime number

PL/SQL procedure successfully completed.

SQL>

SQL> edit department

SQL> @department

value of a: 10

value of a: 11

value of a: 12

value of a: 13

value of a: 14

value of a: 15

PL/SQL procedure successfully completed.

SQL> declare

2 a number(2):=10;

3 begin

4 while a<20 loop

5 dbms\_output.put\_line('value of a: '||a);

6 a:=a+1;

7 if a>15 then

8 exit;

9 end if;

10 end loop;

11 end;

12 /

value of a: 10

value of a: 11

value of a: 12

value of a: 13

value of a: 14

value of a: 15

PL/SQL procedure successfully completed.

SQL> edit department

SQL> @department

Value of a :10

Value of a :11

Value of a :12

Value of a :13

Value of a :14

Value of a :15

PL/SQL procedure successfully completed.

SQL> edit department

SQL> @department

if choice:='y'

\*

ERROR at line 11:

ORA-06550: line 11, column 10:

PLS-00103: Encountered the symbol "=" when expecting one of the following:

. ( \* @ % & = - + < / > at in is mod remainder not rem then

<an exponent (\*\*)> <> or != or ~= >= <= <> and or like LIKE2\_

LIKE4\_ LIKEC\_ between || multiset member SUBMULTISET\_

The symbol "\* was inserted before "=" to continue.

SQL> edit department

SQL> @department

Ajman khan wazir

Infotech

Hello! I"m John Smith from Infotech.

PL/SQL procedure successfully completed.

SQL> declare

2 name varchar2(20);

3 company varchar2(30);

4 introduction clob;

5 choice char(1);

6 begin

7 name:='Ajman khan wazir';

8 company:='Infotech';

9 introduction:='Hello! I"m John Smith from Infotech.';

10 choice:='y';

11 if choice='y'

12 then

13 dbms\_output.put\_line(name);

14 dbms\_output.put\_line(company);

15 dbms\_output.put\_line(introduction);

16 end if;

17 end;

18 /

Ajman khan wazir

Infotech

Hello! I"m John Smith from Infotech.

PL/SQL procedure successfully completed.

SQL> edit department

SQL> @department

elif choice='z'

\*

ERROR at line 16:

ORA-06550: line 16, column 6:

PLS-00103: Encountered the symbol "CHOICE" when expecting one of the following:

:= . ( @ % ;

SQL> edit department

SQL> @department

if choice='z';

\*

ERROR at line 16:

ORA-06550: line 16, column 15:

PLS-00103: Encountered the symbol ";" when expecting one of the following:

\* & - + / at mod remainder rem then <an exponent (\*\*)> and or

|| multiset

The symbol ";" was ignored.

SQL> edit department

SQL> @department

Ajman khan wazir

Infotech

PL/SQL procedure successfully completed.

SQL> declare

2 name varchar2(20);

3 company varchar2(30);

4 introduction clob;

5 choice char(1);

6 begin

7 name:='Ajman khan wazir';

8 company:='Infotech';

9 introduction:='Hello! I"m John Smith from Infotech.';

10 choice:='y';

11 if choice='y'

12 then

13 dbms\_output.put\_line(name);

14 dbms\_output.put\_line(company);

15 else

16 dbms\_output.put\_line(company);

17 dbms\_output.put\_line(introduction);

18 end if;

19 end;

20 /

Ajman khan wazir

Infotech

PL/SQL procedure successfully completed.

