

PLSQL Anonymous block

```
DECLARE
    <declarations section>
BEGIN
    <executable command(s)>
EXCEPTION
    <exception handling>
END;
```

Explicit Cursors

```
CURSOR cursor_name IS select_statement;
```

Syntax for Exception Handling

```
DECLARE
    <declarations section>
BEGIN
    <executable command(s)>
EXCEPTION
    <exception handling goes here >
    WHEN exception1 THEN
        exception1-handling-statements
    WHEN exception2 THEN
        exception2-handling-statements
    .....
    WHEN others THEN
        exception3-handling-statements
END;
```

Defining a Record

```
TYPE

type_name IS RECORD

    ( field_name1  datatype1  [NOT NULL]  [:= DEFAULT EXPRESSION],
      field_name2  datatype2  [NOT NULL]  [:= DEFAULT EXPRESSION],
      ...
      field_nameN  datatypeN  [NOT NULL]  [:= DEFAULT EXPRESSION]);

record-name  type_name;
```

Creating a Procedure

```
CREATE [OR REPLACE] PROCEDURE procedure_name
[(parameter_name [IN | OUT | IN OUT] type [, ...])]
{IS | AS}
BEGIN
    < procedure_body >
END procedure_name;
```

Creating a Function

```
CREATE [OR REPLACE] FUNCTION function_name
[(parameter_name [IN | OUT | IN OUT] type [, ...])]
RETURN return_datatype
{IS | AS}
BEGIN
    < function_body >
END [function_name];
```

User-Defined Package Creation

Package Specification :

```
CREATE OR REPLACE PACKAGE package_name IS  
    procedure_specification  
    function_specification  
    variable_declaration  
    cursor_declaration etc.  
END package_name;
```

Package Body :

```
CREATE OR REPLACE PACKAGE BODY package_name IS  
    private_variable  
    procedure_definition  
    function_definition etc.  
    private function or procedure definition  
    [ BEGIN executable statements ]  
    [ EXCEPTION exception handlers ]  
END package_name;
```

Collection

PLSQL Table

```
TYPE type_name IS TABLE OF element_type [NOT NULL] INDEX BY subscript_type;
```

Nested Tables

```
TYPE type_name IS TABLE OF element_type [NOT NULL];
```

VARRAY

```
TYPE type_name IS VARRAY(max_size) OF element data_type;
```