

Common annotations

--%disabled	Suite / context / test will not execute
--%rollback(auto / manual)	Automatic(default) / manual transaction control
--%displayname(description)	Description of context / test / suite

Procedure annotations

--%test(description)	Procedure is a test (with description)
--%beforetest(procedure [, ...])	Procedure(s) to run before annotated test
--%aftertest(procedure [, ...])	Procedure(s) to run after annotated test
--%beforeall	Procedure to run before first test in suite/context
--%afterall	Procedure to run after last test in suite/context
--%beforeeach	Procedure to run before each test in suite/context
--%aftereach	Procedure to run after each test in suite/context
--%throws(exception [, ...])	Test expects exception(s) to be thrown

Package annotations

--%suite(description)	Package is a test suite (with description)
--%suitepath(com.acme.bomb)	Similar to classpath (Java) Group suites in namespaces
--%context(name)	Starts sub-suite in a suite
--%endcontext	Ends sub-suite in a suite

Package annotations (cont)

--%beforeall(procedure [, ...])	Procedure(s) to run before all tests in suite/context
--%afterall(procedure [, ...])	Procedure(s) to run after all tests in suite/context
--%beforeeach(procedure [, ...])	Procedure(s) to run before each tests in suite/context
--%aftereach(procedure [, ...])	Procedure(s) to run after each tests in suite/context

Annotations are single-line comments starting with a % sign.
Needed in package specification only ([documentation](#))

Equality matcher

equal

```
ut.expect( 'a dog' ).to_equal(
    'a dog' , a_nulls_are_equal => false );
a_nulls_are_equal is true by default
```

equal with cursors

```
open l_expected for select * from all_objects;
open l_actual for select * from all_objects;
ut.expect( l_expected )
    .to_equal( l_actual )
    .exclude( 'owner' )
    .join_by( 'name' );
```

equal on objects

```
ut.expect(
    anydata.convertObject(l_expected) )
    .to_equal(
    anydata.convertObject(l_actual) );
```

equal on collections

```
ut.expect(
    anydata.convertCollection(l_expected) )
    .to_equal(
    anydata.convertCollection(l_actual) );
```

Expectation syntax

Base expectation

```
ut.expect( actual_value ).to_( matcher );
```

Negated expectation

```
ut.expect( actual_value ).not_to( matcher );
```



Expectation syntax (cont)

Shortcuts syntax

```
ut.expect( actual_value ).to_matcher;
ut.expect( actual_value ).not_to_matcher;
```

Executing tests

<code>exec ut.run();</code>	All tests in my current schema
<code>alter session set current_schema='HR';</code> <code>exec ut.run();</code>	All tests in current schema after it was changed to HR
<code>exec ut.run('HR');</code>	All tests in specific schema
<code>exec ut.run('test_betwnstr');</code>	All tests in package of current schema
<code>exec ut.run('hr.test_betwnstr.big_end_position');</code>	Specific test only
<code>exec ut.run('hr.test_award_bonus, hr.test_betwnstr.big_end_position');</code>	Run several items
<code>exec ut.run(':com.my_org.my_project');</code> <code>;</code>	Run using <i>suitepath</i>
<code>select * from table(ut.run());</code>	All tests as a select statement

Non-equality matchers

be_like

```
ut.expect( 'Lorem_impsum' ).to_be_like(
  a_mask => '%rem\_%', a_escape_char => '\ ' );
ut.expect( 'Lorem_impsum' ).to_be_like( '%re%su' );
a_mask, a_escape_char -> see Oracle like operator
```

match

```
ut.expect( '123-456-ABcd' ).to_match(
  a_pattern=>'d{3}-d{3}-[a-z]', a_modifiers=>'i'
);
ut.expect( 'some value' ).to_match( '^some.*' );
a_pattern, a_modifiers -> see regexp_like function
```

be_between

```
ut.expect( 3 ).to_be_between( 1, 3 );
```

Non-equality matchers (cont)

be_greater_or_equal

```
ut.expect( 3 ).to_be_greater_or_equal( 2 );
```

be_greater_than

```
ut.expect( 2 ).to_be_greater_than( 1 );
```

be_less_or_equal

```
ut.expect( 3 ).to_be_less_or_equal( 3 );
```

be_less_than

```
ut.expect( 3 ).to_be_less_than( 4 );
```

have_count

```
ut_expect( v_cursor ).to_have_count(10);
```

Unary matchers

be_empty

```
open l_cursor for select * from dual where 1 = 0;
ut.expect( l_cursor ).to_( be_empty() );
```

be_true

```
ut.expect( ( 1 = 1 ) ).to_( be_true() );
```

be_false

```
ut.expect( ( 1 = 0 ) ).to_( be_false() );
```

be_null

```
ut.expect( 1 ).to_( be_null() );
```

be_not_null

```
ut.expect( to_clob('ABC') ).to_( be_not_null() );
```

Reporting

Color output

```
exec ut.run(a_color_console=>true);
With sqlcl
or sqlPlus (Mac, Unix, Windows ANSICON)
```

JUnit reporter

```
exec ut.run(ut_junit_reporter());
JUnit-compatible XML report for CI servers
```

Coverage html reporter

```
exec ut.run(ut_coverage_html_reporter());
Produces HTML coverage report
```

Documentation for coverage and reporters

