

PARTIAL Exam 1 Reference Packet

(Note that some items here may be more pertinent than others; you'll need to be discerning.)

Some fun Oracle SQL and PL/SQL facts!

- You may recall that, for scalar (single-valued) variables, the PL/SQL `INTO` clause for `select` statements does not like having anything but exactly ONE value inserted into each such scalar variable following the keyword `INTO`.
 - If there are NO projected values to put into such a variable? Oracle will throw a `NO_DATA_FOUND` exception.
 - If there is MORE THAN ONE projected value to put into such a variable? Oracle will throw a `TOO_MANY_ROWS` exception.
 - And, if the single value projected can't be assigned to such a variable because of type incompatibility, Oracle will throw a `VALUE_ERROR` exception.
- `OTHERS` is a PL/SQL keyword that can be used to catch any exception thrown.

Example 1 - `insert_odetails`

```
create or replace procedure insert_odetails(onum integer, lnum integer,
                                           isbn varchar2, oqty integer) as
  invalid_quantity exception;
begin
  if (oqty < 1) then
    raise invalid_quantity;
  end if;

  insert into order_detail(ord_no, line_no, isbn, order_qty)
  values
  (onum, lnum, isbn, oqty);
exception
  when dup_val_on_index then
    dbms_output.put_line('PRIMARY KEY VIOLATION!');
    dbms_output.put_line('<' || sqlcode || '>' || '--' || sqlerrm);
  when invalid_quantity then
    dbms_output.put_line('quantity is invalid');
    dbms_output.put_line(sqlcode || '--' || sqlerrm);
  when others then
    dbms_output.put_line('other error:');
    dbms_output.put_line(sqlcode || '--' || sqlerrm);
end;
/
show errors
```

Example 2 - how_many

```
create or replace function how_many(title varchar2) return integer as
    num_title_rows integer;
    num_on_hand     integer;
begin
    select nvl(count(*), 0)
    into num_title_rows
    from title
    where title_name = title;

    if (num_title_rows = 0) then
        num_on_hand := 0;    -- if title doesn't exist, then can't have
                            -- any copies of it...!
    else
        select qty_on_hand
        into num_on_hand
        from title
        where title_name = title;
    end if;

    return num_on_hand;
end;
/
show errors
```

Example 3 - adapted version of html5-template.html

```
<!DOCTYPE html>
<html>
<head>
    <title> </title>
    <meta charset="utf-8" />
</head>
<body>
    <hr />
    <p>
        <a href="http://validator.w3.org/check/referer">
            Validate this HTML5 page
        </a>
    </p>
    <p>
        For full credit, this page must also pass the tests at
        <a href="http://lint.brihten.com/html/">
            http://lint.brihten.com/html/ </a> when its URL is
            entered (and without modifying the default options).
    </p>
</body>
</html>
```

Example 4 - example.css

```
h1, h3, h5
{
    color: red;
    font-family: arial
}

p.right
{
    text-align: right
}

.center
{
    text-align: center
}
```

Example 5 - two-params-form.html

```
<!DOCTYPE html>
<html>
<head>
    <title>Form for TwoParams servlet (eventually) </title>
    <meta charset="utf-8" />

    <link href="two-param-form.css" type="text/css" rel="stylesheet" />

    <script type="text/javascript">
        window.onload =
            function()
            {
                var parameterForm = document.getElementById("paramForm");
                parameterForm.onsubmit = allFilled;
            };

        function allFilled()
        {
            var val1 = document.getElementById("param1").value;
            var val2 = document.getElementById("param2").value;
            var result;

            if ((!val1) || (!val2))
            {
                alert("must fill in all fields before submit!");
                result = false;
            }
            else
            {
                result = true;
            }
            return result;
        }
    </script>
</head>
```

```
<body>
  <noscript>
    <p class="error">
      Your browser does not support JavaScript, or has it disabled;
      this page will not behave as it should.
    </p>
    <hr />
  </noscript>

  <h1>Form for TwoParams servlet (eventually!) </h1>
  <form action="http://users.humboldt.edu/smtuttle" id="paramForm" >
    <fieldset>
      <legend>Enter Parameters for Servlet</legend>
      <label class="heading" for="param1">Parameter 1:</label>
      <input type="text" name="first" id="param1" /> <br />

      <label class="heading" for="param2">Parameter 2:</label>
      <input type="text" name="second"
        class="right" id="param2" value="13" /> <br />

      <input type="submit" value="submit values" />
    </fieldset>
  </form>
  <hr />
  <p>
    <a href="http://validator.w3.org/check/referer">
      Validate this HTML5 page
    </a>
  </p>
  <p>
    For full credit, this page must also pass the tests at
    <a href="http://lint.brihten.com/html/">
      http://lint.brihten.com/html/ </a> when its URL is
    entered (and without modifying the default options).
  </p>
  <p>
    <a href=
      "http://jigsaw.w3.org/css-validator/check/referer?profile=css3">
      
    </a>
  </p>
</body>
</html>
```

Example 7: two-param-form.css

```
fieldset
{
    background-color: #ffffcc;
    margin-left: auto;
    margin-right: auto;
    width: 21em;
}
form
{
    font-family: "Helvetica", sans-serif;
}
input
{
    margin-bottom: 0.5em;
}
input[type="submit"]
{
    font-weight: bold;
    margin-left: 10em;
    margin-top: 0.5em;
    font-family: "Helvetica", sans-serif;
}
label.heading
{
    float: left;
    margin-right: 1em;
    text-align: right;
    width: 7em;
}
legend
{
    background-color: white;
    border: 1px solid black;
    padding: 0.25em;
    margin-bottom: 0.25cm;
}
.right
{
    text-align: right
}
.error
{
    color: red;
    padding: 1em;
    border: 2px solid black;
}
```

Example 8 - formy.html

```
<!DOCTYPE html>
<html>
<head>
  <title> A few more elements </title>
  <meta charset="utf-8" />
</head>

<body>
<h1> A few more elements </h1>
  <form action="http://users.humboldt.edu/smtuttle/">
    <p> <label> <input type="radio" name="ice_cream_flavor"
      value="chocolate" />
      Chocolate </label> </p>
    <p> <label> <input type="radio" name="ice_cream_flavor"
      value="strawberry" />
      Strawberry </label> </p>
    <p> <label> <input type="checkbox" name="bike" />
      Bike </label> </p>
    <p> <label> <input type="checkbox" name="car" />
      Car </label> </p>
    <p> <select name="chocolate">
      <option value="ghirardeli"> Ghirardeli </option>
      <option value="hersheys"> Hershey's </option>
    </select> </p>
    <p> <input type="submit" /> </p>
  </form>

  <hr />
  <p>
    <a href="http://validator.w3.org/check/referer">
      Validate this HTML5 page
    </a>
  </p>

  <p>
    For full credit, this page must also pass the tests at
    <a href="http://lint.brihten.com/html/">
      http://lint.brihten.com/html/ </a> when its URL is
    entered (and without modifying the default options).
  </p>
</body>
</html>
```