

Section 1 Lesson 1: Case and Character Manipulation

Try It / Solve It

1. Using the three separate words “Oracle,” “Internet,” and “Academy,” use one command to produce the following output:

The Best Class
Oracle Internet Academy

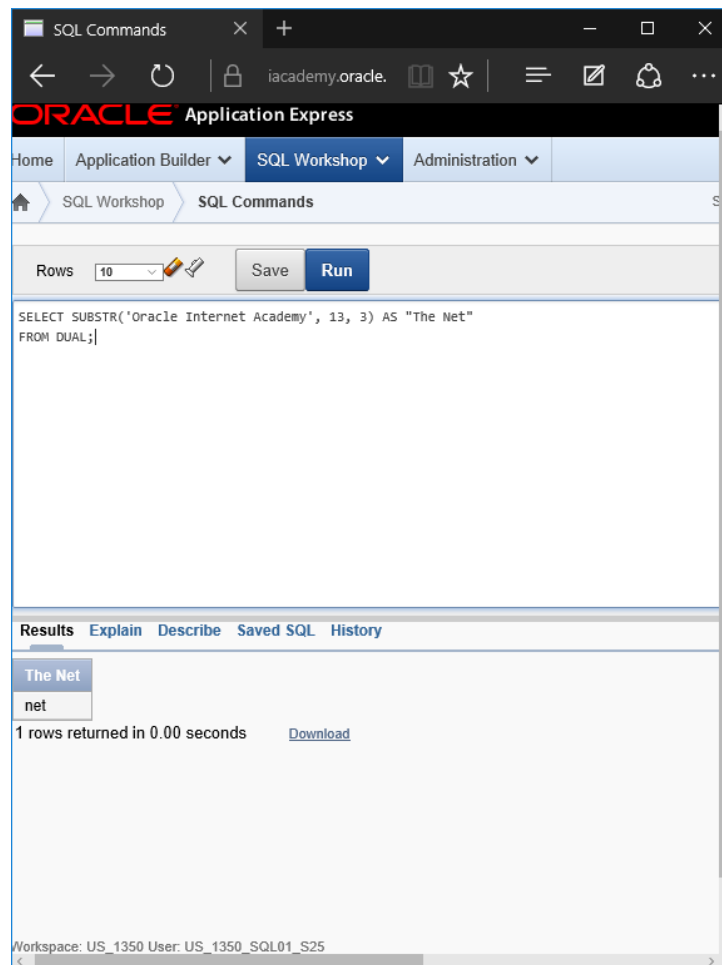
The screenshot shows the Oracle SQL Workshop interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' page is displayed. The 'Rows' dropdown is set to 10. The SQL command entered is: `SELECT 'Oracle' || ' ' || 'Internet' || ' ' || 'Academy' AS "The Best Class" FROM DUAL;`. The 'Run' button is highlighted. Below the command, the 'Results' tab is active, showing the output:

The Best Class
Oracle Internet Academy

. The status bar at the bottom indicates '1 rows returned in 0.00 seconds' and provides a 'Download' link. The workspace information at the bottom reads 'Workspace: US_1350 User: US_1350_SQL01_S25'.

2. Use the string “Oracle Internet Academy” to produce the following output:

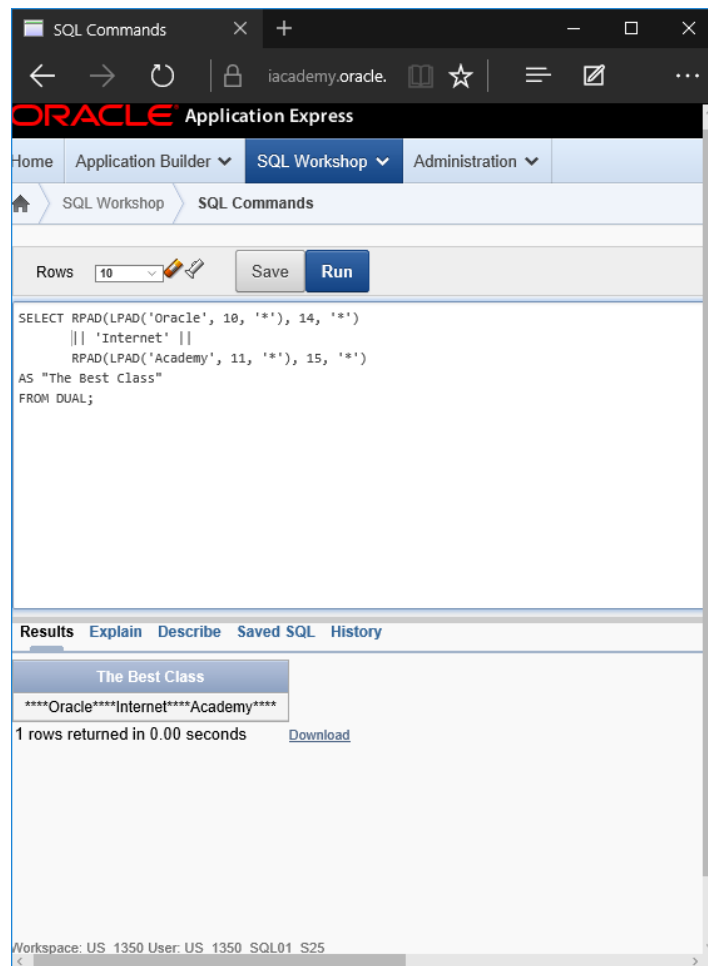
The Net
net



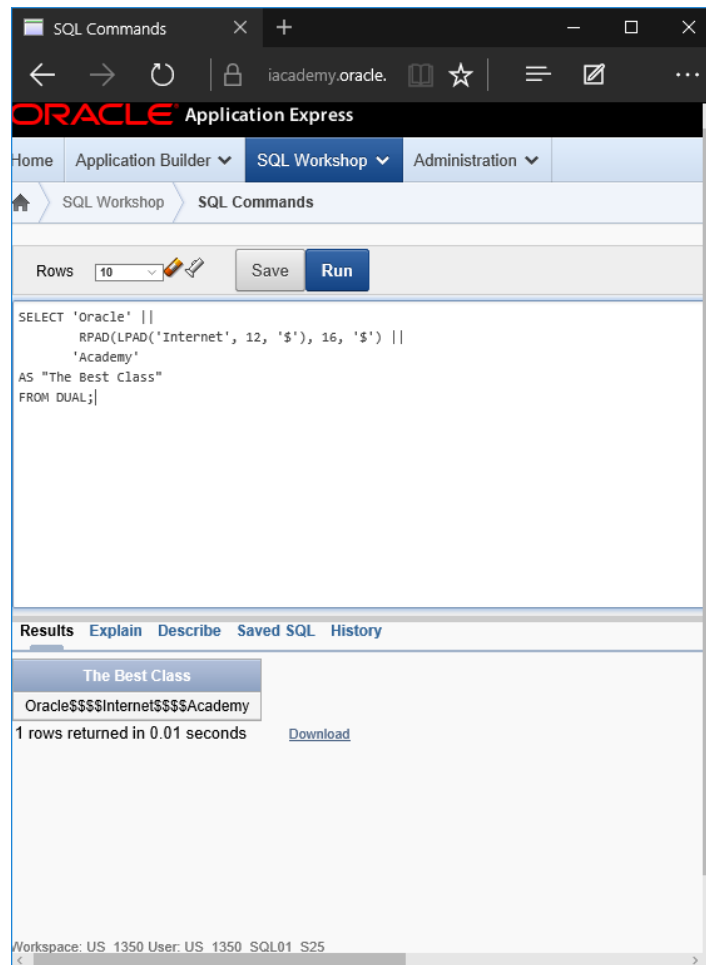
3. What is the length of the string “Oracle Internet Academy”? **The length is 23 characters.**

4. What’s the position of “l” in “Oracle Internet Academy”? **l is in position 8.**

5. Starting with the string “Oracle Internet Academy”, pad the string to create
****Oracle****Internet****Academy****



6. Starting with the string “Oracle Internet Academy”, pad the string to produce:
Oracle\$\$\$Internet\$\$\$Academy



7. Using the string 'Oracle Internet Academy', produce the output shown using the REPLACE function.

The Best Class
Oracle 2013-2014 Academy

The screenshot shows the Oracle Application Express interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation bar, there is a 'Rows' dropdown set to '10', a 'Save' button, and a 'Run' button. The SQL command area contains the following query:

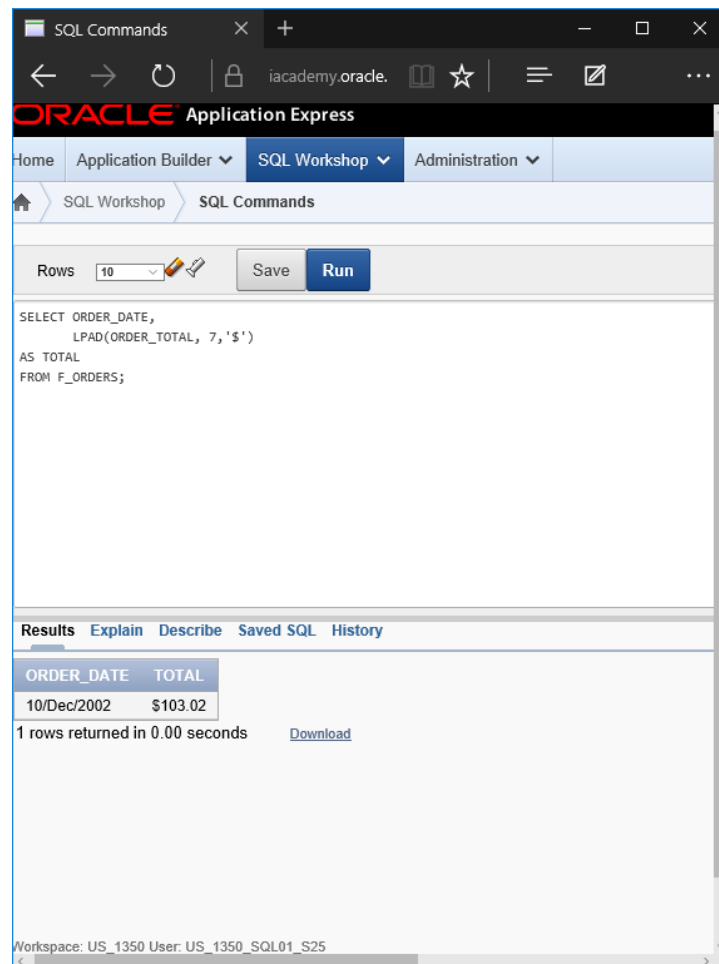
```
SELECT REPLACE('Oracle Internet Academy',
              'Internet',
              '2013-2014')
AS "The Best Class"
FROM DUAL;
```

Below the SQL command area, the 'Results' tab is active. It displays the output of the query in a table with one row:

The Best Class
Oracle 2013-2014 Academy

Below the table, it states '1 rows returned in 0.00 seconds' and provides a 'Download' link.

8. List the order date and the order total from the Global Fast Foods F_ORDERS table. Name the order total as TOTAL, and fill in the empty spaces to the left of the order total with \$.



The screenshot shows the Oracle Application Express SQL Workshop interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation bar, there is a 'Rows' dropdown set to '10', a 'Save' button, and a 'Run' button. The SQL command area contains the following query:

```
SELECT ORDER_DATE,  
       LPAD(ORDER_TOTAL, 7, '$')  
AS TOTAL  
FROM F_ORDERS;
```

Below the SQL command area, the 'Results' tab is active, displaying the query results in a table:

ORDER_DATE	TOTAL
10/Dec/2002	\$103.02

Below the table, it states '1 rows returned in 0.00 seconds' and provides a 'Download' link. The bottom status bar shows 'Workspace: US_1350 User: US_1350_SQL01_S25'.

9. Write a query that will output a column called "ADDRESS" which has the following information: ZOE TWEE 1009 OLIVER AVENUE BOSTON, MA 12889. Use the Global Fast Foods F_CUSTOMERS table.

The screenshot shows the Oracle Application Express SQL Workshop interface. The browser address bar displays 'iacademy.oracle.'. The page title is 'ORACLE Application Express'. The navigation tabs include 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation, there are buttons for 'Save' and 'Run', and a 'Rows' dropdown set to '10'. The SQL command area contains the following query:

```
SELECT FIRST_NAME  
|| ' ' ||  
LAST_NAME  
|| ' ' ||  
ADDRESS  
|| ' ' ||  
CITY  
|| ', ' ||  
STATE  
|| ' ' ||  
ZIP  
|| ' ' ||  
AS ADDRESS  
FROM F_CUSTOMERS  
WHERE ID = 456;
```

Below the query, the 'Results' tab is active, showing a table with one column, 'ADDRESS'. The table contains one row with the value 'Zoe Twee 1009 Oliver Avenue Boston, MA 12889'. Below the table, it states '1 rows returned in 0.01 seconds' and provides a 'Download' link. The status bar at the bottom indicates 'Workspace: US_1350 User: US_1350_SQL01_S25'.

ADDRESS
Zoe Twee 1009 Oliver Avenue Boston, MA 12889

10. Write a query to return the first character of the first name concatenated to the last_name, the salary, and the department id for employees working in department 20. Give the first expression an alias of Name. Use the EMPLOYEES table. Change the query to use a substitution variable instead of the hard coded value 20 for department id. Run the query for department 30 and 50 without changing the original where-clause in your statement.

The image displays three screenshots of the Oracle SQL Command window, illustrating the execution of a query to retrieve employee data based on department ID.

First Screenshot: The SQL Command window shows the following query:

```
SELECT SUBSTR(FIRST_NAME, 1, 1) || LAST_NAME  
DEPARTMENT_ID  
FROM EMPLOYEES  
WHERE DEPARTMENT_ID = 20;
```

The query is executed, and the results are displayed in a table:

NAME	DEPARTMENT_ID
MHartstein	20
PFay	20

2 rows returned in 0.02 seconds

Second Screenshot: The SQL Command window shows the same query, but with a substitution variable used for the department ID:

```
SELECT SUBSTR(FIRST_NAME, 1, 1) || LAST_NAME  
DEPARTMENT_ID  
FROM EMPLOYEES  
WHERE DEPARTMENT_ID = :DEPT_ID;
```

The query is executed, and the results are displayed as "no data found".

Third Screenshot: The SQL Command window shows the same query, but with the substitution variable set to 50:

```
SELECT SUBSTR(FIRST_NAME, 1, 1) || LAST_NAME  
DEPARTMENT_ID  
FROM EMPLOYEES  
WHERE DEPARTMENT_ID = :DEPT_ID;
```

The query is executed, and the results are displayed in a table:

NAME	DEPARTMENT_ID
KMourgos	50
TRajs	50
CDavies	50
RMatos	50
PVargas	50

5 rows returned in 0.01 seconds

11. Using a substitution variable for the department name, write a query listing department id, department name, and location id for departments located in the_department_of_your_choice. Use the DEPARTMENTS table. Note: All substitution variables in OAE are treated as character strings, so no quotes (' ') are needed.

The screenshot shows the Oracle Application Express (OAE) SQL Workshop interface. The browser address bar shows 'iacademy.oracle.'. The navigation tabs include 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation, there is a 'Rows' dropdown set to '10', and 'Save' and 'Run' buttons. The SQL command area contains the following query:

```
SELECT DEPARTMENT_ID, DEPARTMENT_NAME, LOCATION_ID
FROM DEPARTMENTS
WHERE DEPARTMENT_NAME = :DEPT_NAME;
```

Below the SQL command area, there are tabs for 'Results', 'Explain', 'Describe', 'Saved SQL', and 'History'. The 'Results' tab is active, displaying a table with the following data:

DEPARTMENT_ID	DEPARTMENT_NAME	LOCATION_ID
60	IT	1400

Below the table, it says '1 rows returned in 0.00 seconds' and provides a 'Download' link. At the bottom of the interface, the workspace information is displayed: 'Workspace: US_1350 User: US_1350_SQL01_S25'.

12. Write a query that returns all the employee data depending on the month of their hire date. Use the EMPLOYEES table. The statement should return the month part of the hiredate which is then compared to an abbreviated month (JAN, FEB, MAR) passed into the query via a substitution variable.

The screenshot shows the Oracle Application Express SQL Workshop interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, showing the 'SQL Commands' section. The schema is set to 'US_1350_SQL01_S25'. The query editor contains the following SQL statement:

```
SELECT *
FROM EMPLOYEES
WHERE TO_CHAR(HIRE_DATE, 'MON') = :HIRE_MONTH;
```

Below the query editor, the 'Results' tab is selected, displaying a table with 11 columns: EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SALARY, COMMISSION_PCT, MANAGER_ID, and DEPARTMENT_ID. The table contains 4 rows of data. Below the table, it states '4 rows returned in 0.01 seconds' and provides a 'Download' link. The footer of the interface shows 'Application Express 4.2.5.00.08' and 'Workspace: US_1350 User: US_1350_SQL01_S25'.

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
102	Lex	De Haan	LDEHAAN	515.123.4569	13/Jan/1993	AD_VP	17000	-	100	90
149	Eleni	Zlotkey	EZLOTKEY	011.44.1344.429018	29/Jan/2000	SA_MAN	10500	.2	100	80
142	Curtis	Davies	CDAVIES	650.121.2994	29/Jan/1997	ST_CLERK	3100	-	124	50
103	Alexander	Hunold	AHUNOLD	590.423.4567	03/Jan/1990	IT_PROG	9000	-	102	60

Section 1 Lesson 2: Number Functions

Try It / Solve It

1. Display Oracle database employee last_name and salary for employee_ids between 100 and 102. Include a third column that divides each salary by 1.55 and rounds the result to two decimal places.

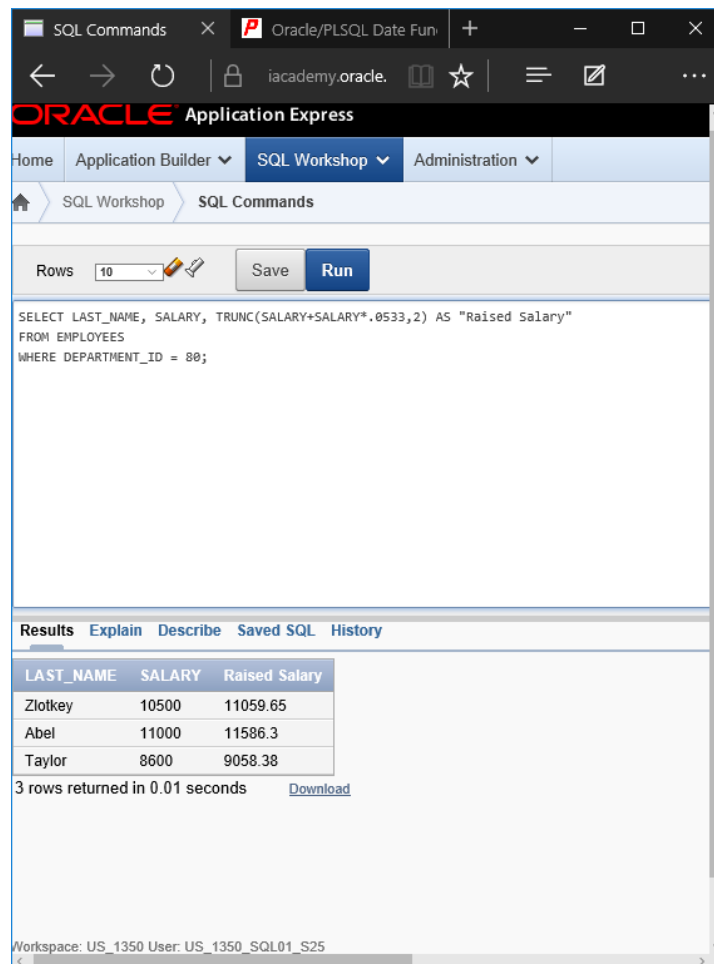
The screenshot shows the Oracle Application Express SQL Workshop interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation bar, there is a 'Rows' dropdown set to 10, and 'Save' and 'Run' buttons. The SQL command area contains the following query:

```
SELECT LAST_NAME, SALARY, ROUND(SALARY/1.55,2) AS "SALARY/1.55"  
FROM EMPLOYEES  
where EMPLOYEE_ID BETWEEN 100 AND 102;
```

Below the command area, the 'Results' tab is active, displaying a table with three columns: LAST_NAME, SALARY, and SALARY/1.55. The table contains three rows of data. Below the table, it states '3 rows returned in 0.01 seconds' and provides a 'Download' link. The bottom status bar shows 'Workspace: US_1350 User: US_1350_SQL01_S25'.

LAST_NAME	SALARY	SALARY/1.55
King	24000	15483.87
Kochhar	17000	10967.74
De Haan	17000	10967.74

2. Display employee last_name and salary for those employees who work in department 80. Give each of them a raise of 5.33% and truncate the result to two decimal places.



The screenshot shows the Oracle SQL Workshop interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation bar, there is a 'Rows' dropdown set to '10', a 'Save' button, and a 'Run' button. The SQL command area contains the following query:

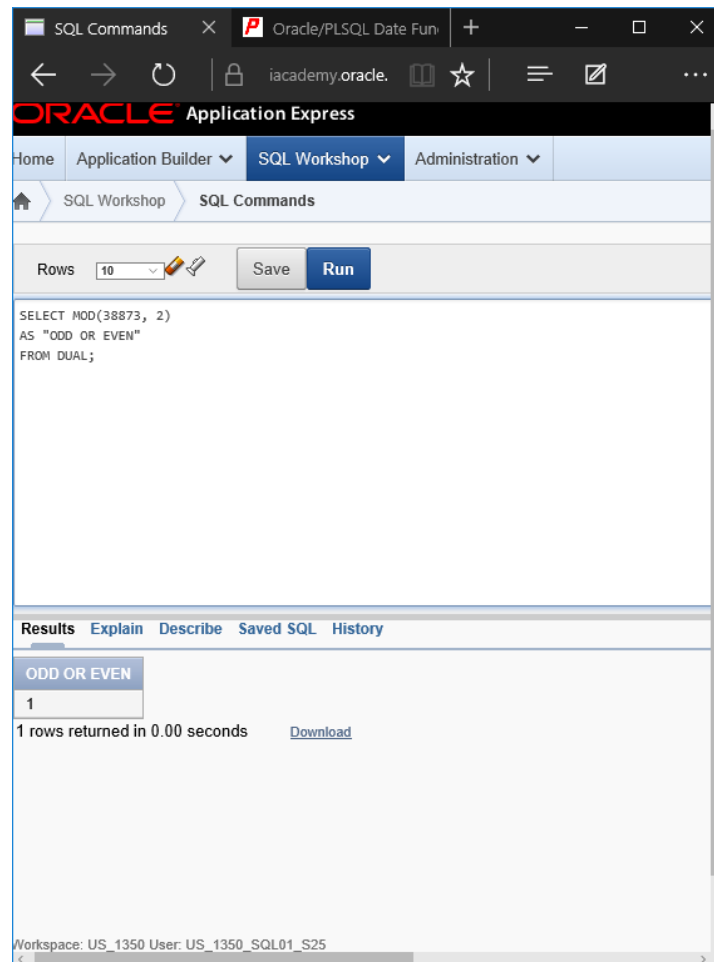
```
SELECT LAST_NAME, SALARY, TRUNC(SALARY+SALARY*.0533,2) AS "Raised Salary"
FROM EMPLOYEES
WHERE DEPARTMENT_ID = 80;
```

Below the query, the 'Results' tab is active, displaying a table with three columns: 'LAST_NAME', 'SALARY', and 'Raised Salary'. The table contains three rows of data:

LAST_NAME	SALARY	Raised Salary
Zlotkey	10500	11059.65
Abel	11000	11586.3
Taylor	8600	9058.38

Below the table, it states '3 rows returned in 0.01 seconds' and provides a 'Download' link. At the bottom of the interface, the workspace information is displayed: 'Workspace: US_1350 User: US_1350_SQL01_S25'.

3. Use a MOD number function to determine whether 38873 is an even number or an odd number. **38873 is odd.**



The screenshot shows the Oracle Application Express interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation bar, there is a 'Rows' dropdown set to '10', a 'Save' button, and a 'Run' button. The SQL command area contains the following query:

```
SELECT MOD(38873, 2)
AS "ODD OR EVEN"
FROM DUAL;
```

Below the command area, the 'Results' tab is active. It displays a table with one column, 'ODD OR EVEN', and one row with the value '1'. Below the table, it states '1 rows returned in 0.00 seconds' and provides a 'Download' link. The bottom status bar shows 'Workspace: US_1350 User: US_1350_SQL01_S25'.

ODD OR EVEN
1

4. Use the DUAL table to process the following numbers:
- 845.553 - round to one decimal place
 - 30695.348 - round to two decimal places
 - 30695.348 - round to -2 decimal places
 - 2.3454 - truncate the 454 from the decimal place

The screenshot shows the Oracle Application Express SQL Workshop interface. The SQL Commands window contains the following query:

```
SELECT ROUND(845.553,1) AS "PART 1",  
       ROUND(30695.348,2) AS "PART 2",  
       ROUND(30695.348,-2) AS "PART 3",  
       TRUNC(2.3454,1) AS "PART 4"  
FROM DUAL;
```

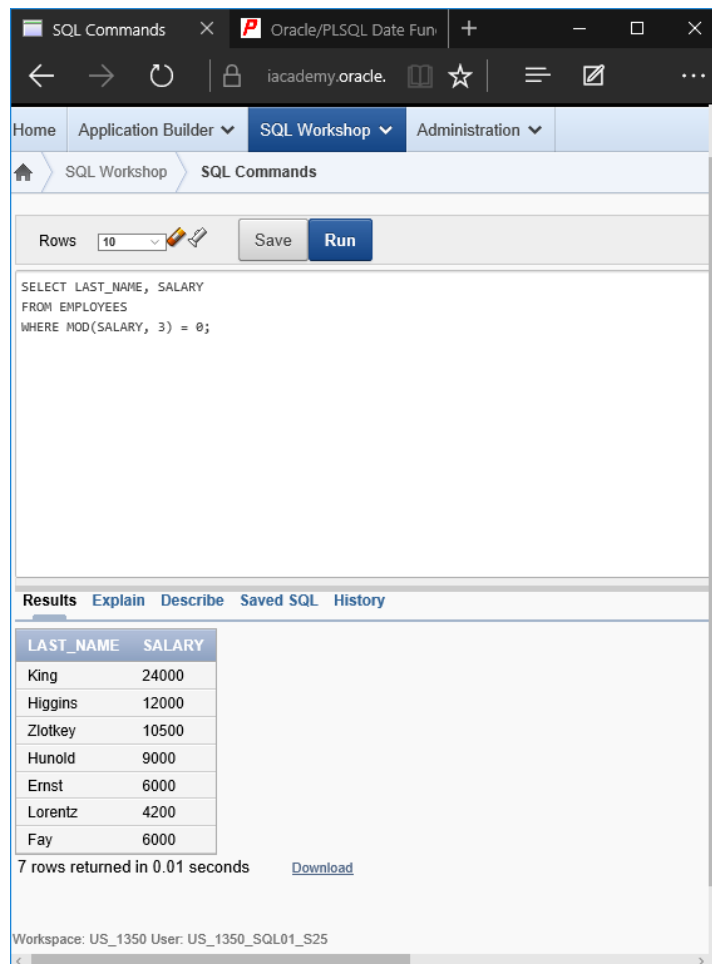
The Results window shows the output of the query:

PART 1	PART 2	PART 3	PART 4
845.6	30695.35	30700	2.3

1 rows returned in 0.00 seconds [Download](#)

Workspace: US_1350 User: US_1350_SQL01_S25

5. Divide each employee's salary by 3. Display only those employees' last names and salaries who earn a salary that is a multiple of 3.



The screenshot shows the Oracle SQL Workshop interface in a web browser. The browser's address bar displays "academy.oracle.". The interface has a top navigation bar with "Home", "Application Builder", "SQL Workshop" (selected), and "Administration". Below this, a breadcrumb trail shows "SQL Workshop" > "SQL Commands".

In the "SQL Commands" section, there is a "Rows" dropdown set to "10", a "Save" button, and a "Run" button. The SQL command entered is:

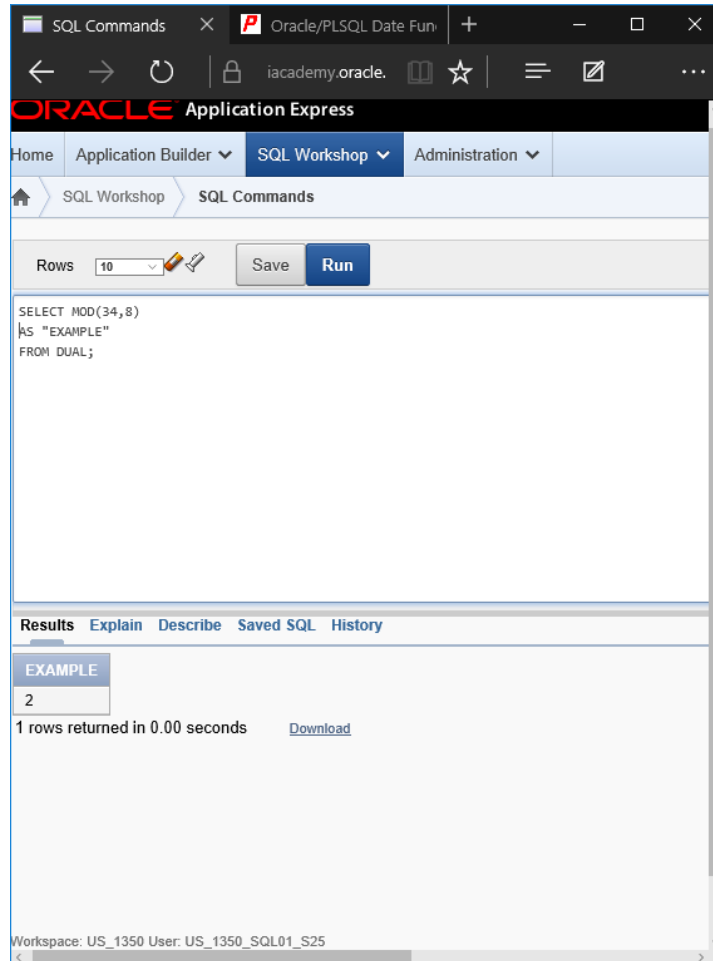
```
SELECT LAST_NAME, SALARY
FROM EMPLOYEES
WHERE MOD(SALARY, 3) = 0;
```

Below the command area, there are tabs for "Results", "Explain", "Describe", "Saved SQL", and "History". The "Results" tab is active, displaying a table with the following data:

LAST_NAME	SALARY
King	24000
Higgins	12000
Zlotkey	10500
Hunold	9000
Ernst	6000
Lorentz	4200
Fay	6000

Below the table, it states "7 rows returned in 0.01 seconds" and provides a "Download" link. At the bottom of the interface, the workspace information is shown: "Workspace: US_1350 User: US_1350_SQL01_S25".

6. Divide 34 by 8. Show only the remainder of the division. Name the output as EXAMPLE.



The screenshot shows the Oracle Application Express interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation bar, there is a 'Rows' dropdown set to '10', a 'Save' button, and a 'Run' button. The SQL command area contains the following text:

```
SELECT MOD(34,8)
AS "EXAMPLE"
FROM DUAL;
```

Below the command area, the 'Results' tab is active. It displays a single row with the value '2' under the column header 'EXAMPLE'. Below the results, it states '1 rows returned in 0.00 seconds' and provides a 'Download' link. The bottom status bar shows 'Workspace: US_1350 User: US_1350_SQL01_S25'.

7. How would you like your paycheck – rounded or truncated? What if your paycheck was calculated to be \$565.784 for the week, but you noticed that it was issued for \$565.78. The loss of .004 cent would probably make very little difference to you. However, what if this was done to one thousand people, one hundred thousand people, or one million people! Would it make a difference then? How much of a difference? **Rounded.**

The screenshot shows the Oracle SQL Workshop interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation bar, there is a 'Rows' dropdown set to '10', a 'Save' button, and a 'Run' button. The SQL command area contains the following query:

```
SELECT .004*1000 AS "loss for 1000 people",  
       .004*100000 AS "loss for 100000 people",  
       .004*1000000 AS "loss for 1000000 people"  
FROM DUAL;
```

Below the SQL command area, the 'Results' tab is active. It displays a table with three columns: 'loss for 1000 people', 'loss for 100000 people', and 'loss for 1000000 people'. The table contains one row with the values 4, 400, and 4000 respectively. Below the table, it states '1 rows returned in 0.00 seconds' and provides a 'Download' link. The bottom status bar shows 'Workspace: US_1350 User: US_1350_SQL01_S25'.

loss for 1000 people	loss for 100000 people	loss for 1000000 people
4	400	4000

Section 1 Lesson 3: Date Functions

Try It / Solve It

1. For DJs on Demand, display the number of months between the event_date of the Vigil wedding and today's date. Round to the nearest month.

The screenshot shows the Oracle Application Express SQL Workshop interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' page is displayed. The 'Rows' dropdown is set to 10. The 'Run' button is highlighted. The SQL command entered is:

```
SELECT NAME AS NAME,  
       ROUND(MONTHS_BETWEEN(CURRENT_DATE, EVENT_DATE),0) AS "Months Until Event"  
FROM D_EVENTS  
WHERE NAME = 'Vigil wedding';
```

The 'Results' tab is selected, showing a table with the following data:

NAME	Months Until Event
Vigil wedding	139

Below the table, it states '1 rows returned in 0.00 seconds' and provides a 'Download' link. The status bar at the bottom indicates 'Workspace: US 1350 User: US 1350 SQL01 S25'.

2. Display the days between the start of last summer's school vacation break and the day school started this year. Assume 30.5 days per month. Name the output "Days."

The screenshot shows the Oracle Application Express interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation bar, there is a 'Rows' dropdown set to '10', a 'Save' button, and a 'Run' button. The SQL command area contains the following query:

```
SELECT ROUND(MONTHS_BETWEEN(
    TO_DATE('2015-09-06', 'YYYY-MM-DD'),
    TO_DATE('2015-08-20', 'YYYY-MM-DD'))
    *30.5, 0)
AS "Days"
FROM DUAL;
```

Below the SQL command area, the 'Results' tab is selected. It shows a table with one column named 'Days' and one row with the value '17'. Below the table, it states '1 rows returned in 0.01 seconds' and provides a 'Download' link. The bottom status bar indicates the workspace is 'US_1350' and the user is 'US_1350 SQL01 S25'.

Days
17

1 rows returned in 0.01 seconds [Download](#)

3. Display the days between January 1 and December 31.

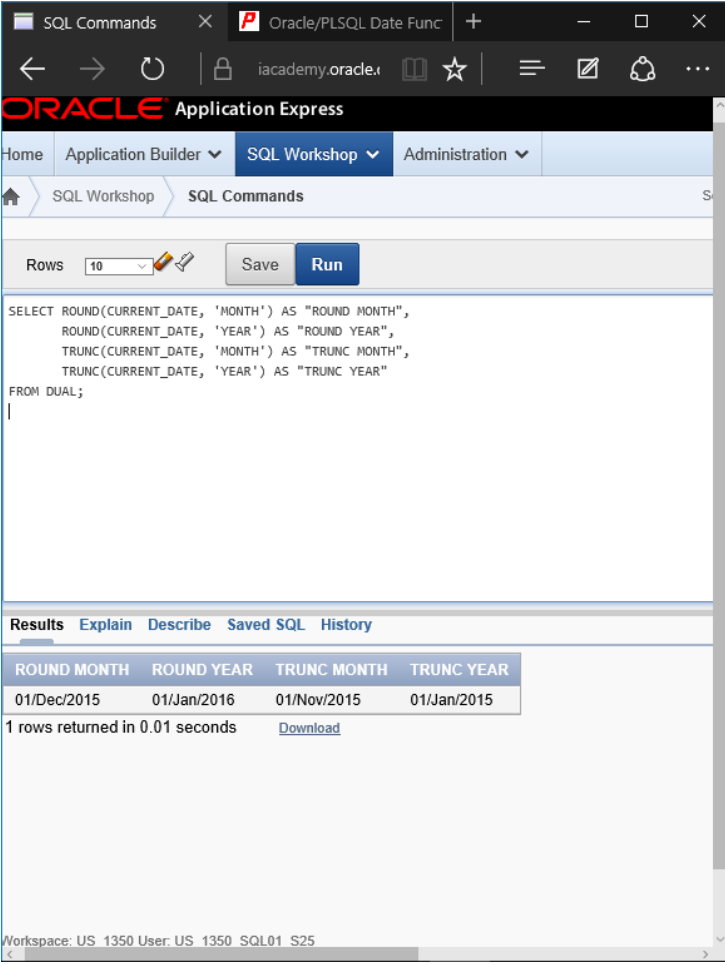
The screenshot shows the Oracle Application Express interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation bar, there is a 'Rows' dropdown set to '10', a 'Save' button, and a 'Run' button. The SQL command area contains the following query:

```
SELECT ROUND(MONTHS_BETWEEN(
  TO_DATE('2015-12-31', 'YYYY-MM-DD'),
  TO_DATE('2015-01-01', 'YYYY-MM-DD'))
  *30.5, 0)
AS "Days"
FROM DUAL;
```

Below the SQL command area, the 'Results' tab is active. It displays a table with one column labeled 'Days' and one row containing the value '365'. Below the table, it states '1 rows returned in 0.00 seconds' and provides a 'Download' link. The bottom status bar shows 'Workspace: US_1350 User: US_1350 SQL01 S25'.

Days
365

4. Using one statement, round today's date to the nearest month and nearest year, and truncate it to the nearest month and nearest year. Use an alias for each column.



The screenshot shows the Oracle Application Express SQL Workshop interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation bar, there is a 'Rows' dropdown set to '10', a 'Save' button, and a 'Run' button. The SQL command area contains the following query:

```
SELECT ROUND(CURRENT_DATE, 'MONTH') AS "ROUND MONTH",  
       ROUND(CURRENT_DATE, 'YEAR') AS "ROUND YEAR",  
       TRUNC(CURRENT_DATE, 'MONTH') AS "TRUNC MONTH",  
       TRUNC(CURRENT_DATE, 'YEAR') AS "TRUNC YEAR"  
FROM DUAL;  
|
```

Below the SQL command area, the 'Results' tab is selected, displaying the query results in a table format. The table has four columns: 'ROUND MONTH', 'ROUND YEAR', 'TRUNC MONTH', and 'TRUNC YEAR'. The results show the current date rounded to the nearest month and year, and truncated to the nearest month and year.

ROUND MONTH	ROUND YEAR	TRUNC MONTH	TRUNC YEAR
01/Dec/2015	01/Jan/2016	01/Nov/2015	01/Jan/2015

Below the table, it indicates '1 rows returned in 0.01 seconds' and provides a 'Download' link. The bottom status bar shows 'Workspace: US_1350 User: US_1350 SQL01 S25'.

5. What is the last day of the month for June 2005? Use an alias for the output.

The screenshot shows the Oracle Application Express interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation bar, there is a 'Rows' dropdown set to '10', a 'Save' button, and a 'Run' button. The SQL command area contains the following query:

```
SELECT LAST_DAY(TO_DATE('2005-06-01', 'YYYY-MM-DD'))  
AS "Last Day"  
FROM DUAL;
```

Below the SQL command area, the 'Results' tab is active. It displays a table with one row:

Last Day
30/Jun/2005

Below the table, it states '1 rows returned in 0.00 seconds' and provides a 'Download' link. The bottom status bar shows 'Workspace: US_1350 User: US_1350 SQL01 S25'.

6. Display the number of years between the Global Fast Foods employee Bob Miller's birthday and today. Round to the nearest year.

The screenshot shows the Oracle SQL Workshop interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation bar, there is a 'Rows' dropdown set to '10', a 'Save' button, and a 'Run' button. The SQL command area contains the following query:

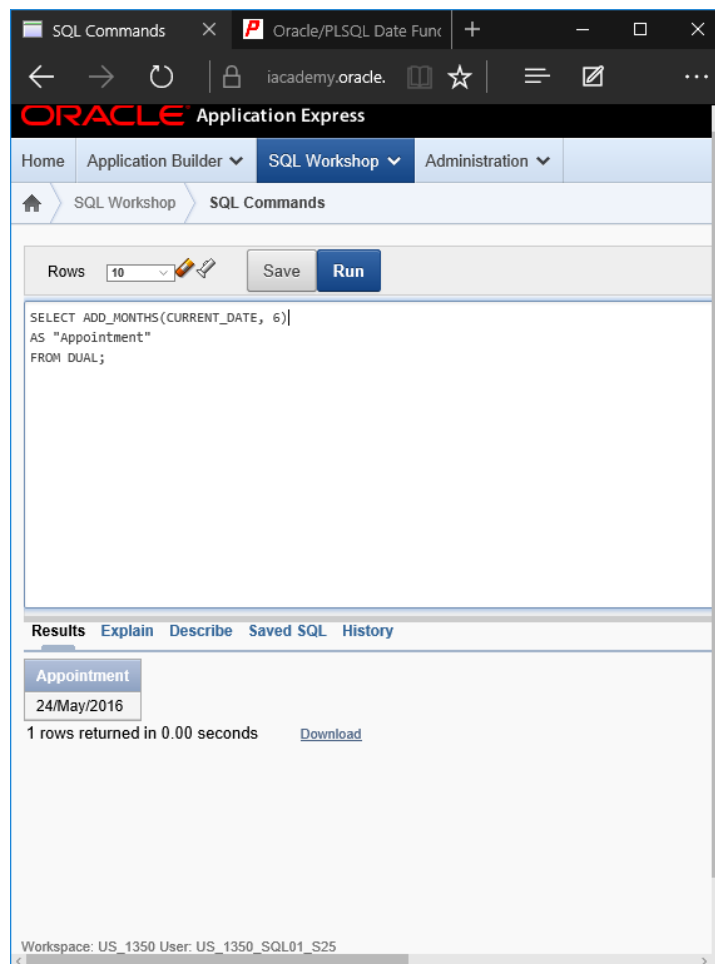
```
SELECT ROUND(MONTHS_BETWEEN(CURRENT_DATE, BIRTHDATE)/12) AS "Years Between"
FROM F_STAFFS
WHERE FIRST_NAME = 'Bob'
AND LAST_NAME = 'Miller';
```

Below the SQL command area, the 'Results' tab is active. It displays a table with one column, 'Years Between', and one row with the value '37'. Below the table, it states '1 rows returned in 0.01 seconds' and provides a 'Download' link. The bottom status bar shows 'Workspace: US 1350 User: US 1350 SQL01 S25'.

Years Between
37

1 rows returned in 0.01 seconds [Download](#)

7. Your next appointment with the dentist is six months from today. On what day will you go to the dentist? Name the output, "Appointment."



The screenshot shows the Oracle Application Express interface. The top navigation bar includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. Below the navigation bar, there is a 'Rows' dropdown set to '10', a 'Save' button, and a 'Run' button. The SQL command entered is:

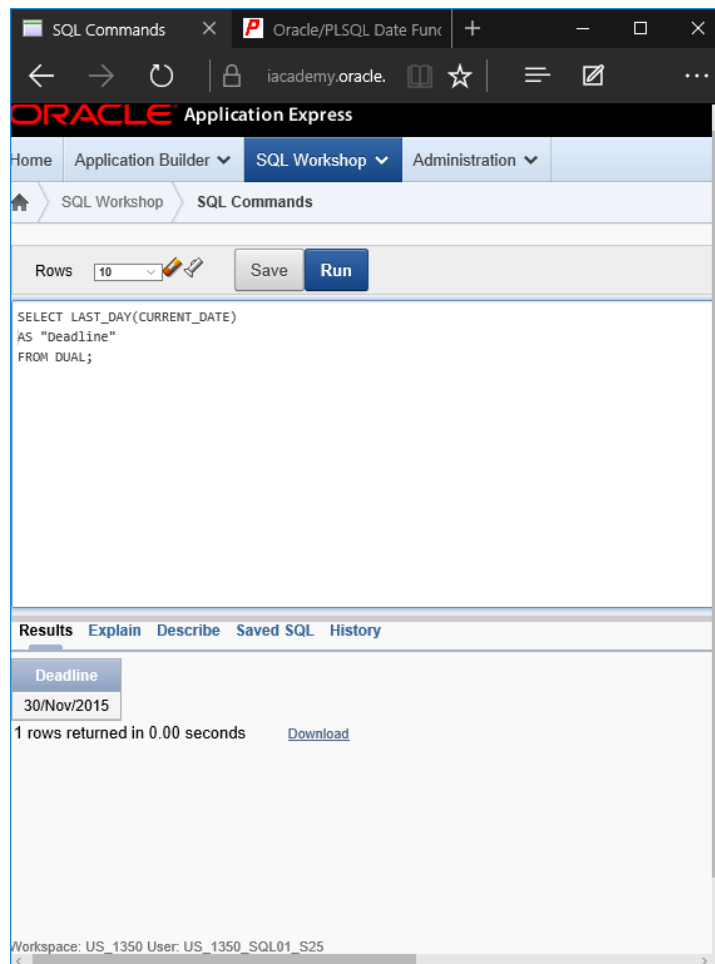
```
SELECT ADD_MONTHS(CURRENT_DATE, 6)|
AS "Appointment"
FROM DUAL;
```

Below the command editor, the 'Results' tab is active. It displays a table with one row:

Appointment
24/May/2016

Below the table, it states '1 rows returned in 0.00 seconds' and provides a 'Download' link. The bottom status bar shows 'Workspace: US_1350 User: US_1350_SQL01_S25'.

8. The teacher said you have until the last day of this month to turn in your research paper. What day will this be? Name the output, "Deadline."



9. How many months between your birthday this year and January 1 next year?

The screenshot shows the Oracle SQL Workshop interface in a web browser. The browser address bar shows 'localhost:1157'. The Oracle Application Express header is visible with tabs for Home, Application Builder, SQL Workshop (selected), and Administration. The SQL Workshop tab is active, showing the SQL Commands page. The SQL editor contains the following query:

```
SELECT ROUND(MONTHS_BETWEEN(
    TO_DATE('2016-01-01', 'YYYY-MM-DD'),
    TO_DATE('2015-05-13', 'YYYY-MM-DD')))|
AS "Months Between"
FROM DUAL;
```

The query has been executed, and the results are displayed in the Results tab. The results show a single row with the value 8 in the column 'Months Between'.

Months Between
8

1 rows returned in 0.00 seconds [Download](#)

Workspace: US_1350 User: US_1350_SQL01_S25

10. What's the date of the next Friday after your birthday this year? Name the output, "First Friday."

The screenshot shows the Oracle Application Express (APEX) SQL Workshop interface. The browser address bar shows 'iacademy.oracle.'. The navigation menu includes 'Home', 'Application Builder', 'SQL Workshop', and 'Administration'. The 'SQL Workshop' tab is active, and the 'SQL Commands' sub-tab is selected. The 'Rows' dropdown is set to '10'. The 'Run' button is highlighted. The SQL command entered is:

```
SELECT NEXT_DAY(TO_DATE('2015-05-13', 'YYYY-MM-DD'), 'FRI')
AS "First Friday"
FROM DUAL;
```

The 'Results' tab is active, displaying the output of the query. The output is a single row with the value '15/May/2015' under the column header 'First Friday'. Below the results, it states '1 rows returned in 0.00 seconds' and provides a 'Download' link. The status bar at the bottom indicates 'Workspace: US_1350 User: US_1350_SQL01_S25'.

First Friday
15/May/2015

11. Name a date function that will return a number. [MONTHS_BETWEEN](#) function yields numerical format output.
12. Name a date function that will return a date. [NEXT_DAY](#) function yields date format output.
13. Give one example of why it is important for businesses to be able to manipulate date data? [Calculating the tenure of an employee.](#)