

1. Write the statement that will display the current system date. The date should have a column label 'Date'.
2. The Human Resources department needs information related to its employees with id 100 to 110 and their respective salary. They need to generate a report which displays the employee number, first name, last name, salary and salary increased by 10.5% (expressed as a whole number) for each employee. Make sure to label the new column 'Latest salary'.

| | employee_id | first_name | last_name | salary | Latest Salary |
|---|-------------|------------|-----------|----------|---------------|
| 1 | 100 | Steven | King | 24000.00 | 26520.00000 |
| 2 | 101 | Neena | Kochhar | 17000.00 | 18785.00000 |
| 3 | 102 | Lex | De Haan | 17000.00 | 18785.00000 |
| 4 | 103 | Alexander | Hunold | 9000.00 | 9945.00000 |
| 5 | 104 | Bruce | Ernst | 6000.00 | 6630.00000 |

....

11 rows returned

3. Add a new column in the report generated in question 2 which calculate the difference between the two salaries. The corresponding result should be placed in a column labelled 'Total Increase'

| | employee_id | first_name | last_name | salary | Latest Salary | Total Increase |
|---|-------------|------------|-----------|----------|---------------|----------------|
| 1 | 100 | Steven | King | 24000.00 | 26520.00000 | 2520.00000 |
| 2 | 101 | Neena | Kochhar | 17000.00 | 18785.00000 | 1785.00000 |
| 3 | 102 | Lex | De Haan | 17000.00 | 18785.00000 | 1785.00000 |
| 4 | 103 | Alexander | Hunold | 9000.00 | 9945.00000 | 945.00000 |
| 5 | 104 | Bruce | Ernst | 6000.00 | 6630.00000 | 630.00000 |

....

11 rows returned

4. Display the first name and its length of all the employees whose name starts with the letters 'D', 'F', and 'M'. Assign an appropriate label for each column and make sure that every letter of the first name is in small case. You are to display your results starting by the longest name first.

| | Name | NAME LENGTH |
|---|----------|-------------|
| 1 | danielle | 8 |
| 2 | michael | 7 |
| 3 | douglas | 7 |
| 4 | michael | 7 |
| 5 | matthew | 7 |

....

15 rows returned

5. Write a query that will return 3 columns. The first columns should be named 'Original Name and Surname' and should have the name and surname in one single column. The second column should be named 'Small name' and should have the name in small case letters. The third column should be named 'Big surname' and should have the surname in capital letters. You are to include only the employees who have a surname which is less than 4 characters long and who contain an E. Also you are to sort your results such that the name with the least amount of characters is placed in the first position.

| | Original Name and Surname | Small Name | Big Surname |
|---|---------------------------|------------|-------------|
| 1 | KiGee | ki | GEE |
| 2 | JohnSeo | john | SEO |
| 3 | DavidLee | david | LEE |

3 rows returned

6. Modify the previous query such that the second and third column are joined together using a function. The column should be renamed to 'Modified Name and Surname'

| | Original Name and Surname | Modified Name and Surname |
|---|---------------------------|---------------------------|
| 1 | KiGee | ki GEE |
| 2 | JohnSeo | john SEO |
| 3 | DavidLee | david LEE |

3 rows returned

7. Write a query that will return the employee number, surname, phone number and date hired using the below format:
 <employee number> - <surname>'s number: <telephone number> ,hired on <date hired>
 The 'Details' column should return only those people who were hired in the month of June. You are to use a function that returns the month in text and compare it to June

| | Details |
|---|--|
| 1 | 100 - King's number: 515.123.4567, hired on Jun 17 1987 12:00AM |
| 2 | 105 - Austin's number: 590.423.4569, hired on Jun 25 1997 12:00AM |
| 3 | 133 - Mallin's number: 650.127.1934, hired on Jun 14 1996 12:00AM |
| 4 | 182 - Sullivan's number: 650.507.9878, hired on Jun 21 1999 12:00AM |
| 5 | 186 - Dellinger's number: 650.509.3876, hired on Jun 24 1998 12:00AM |

• • • •

11 rows returned

8. Once again the Human Resources department would like to obtain some information regarding its employees. You are to generate a report which calculates the number of year for which an employee has been employed for if the current date is taken to be the 1st of January 2016. It is important to display the employee number, surname and the duration of employment ('Years Worked') in separate columns. The third column should display the number of years followed by the word 'years'. Only people who have been employed for 25 years or more are to be returned and the most experienced should be placed at the top.

| | employee_id | last_name | Years Worked |
|---|-------------|-----------|--------------|
| 1 | 100 | King | 29 years |
| 2 | 200 | Whalen | 29 years |
| 3 | 101 | Kochhar | 27 years |

• • • •

5 rows returned

9. Write a statement that will provide information in the following order:
 <employee name> <employee surname> earns <salary> but <3 times the salary > is the dream.
 You are to name the column 'Salary Details' and use string concatenation (+) and not the string concatenation function CONCAT.

| | Salary details |
|---|---|
| 1 | Steven King earns \$24000.00 but \$72000.00 is the dream. |
| 2 | Neena Kochhar earns \$17000.00 but \$51000.00 is the dream. |
| 3 | Lex De Haan earns \$17000.00 but \$51000.00 is the dream. |
| 4 | Alexander Hunold earns \$9000.00 but \$27000.00 is the dream. |
| 5 | Bruce Ernst earns \$6000.00 but \$18000.00 is the dream. |

• • • •

107 rows returned

10. Write a query that will display the name, surname and the department. The department should be obtained from the first part of the job_id. The first two letters of the job_id signify the department. The columns should be labelled name, surname and department and the results should be sorted by department, then by surname and then by name

| | name | surname | department |
|---|---------|---------|------------|
| 1 | William | Gietz | AC |
| 2 | Shelley | Higgins | AC |
| 3 | Lex | De Haan | AD |
| 4 | Steven | King | AD |
| 5 | Neena | Kochhar | AD |

• • • •

107 rows returned

11. Modify the previous query such that now third column displays the job via the job_id column. The job can be found behind the underscore in the job_id column. The column should be named job and the results should be ordered using the second column in descending order

| | name | surname | job |
|---|----------|---------|-------|
| 1 | Eleni | Zlotkey | MAN |
| 2 | Jennifer | Whalen | ASST |
| 3 | Matthew | Weiss | MAN |
| 4 | Alana | Walsh | CLERK |
| 5 | Shanta | Vollman | MAN |

....

107 rows returned

12. Write a query that will display one single column named 'Dep with second letter 'a''. This column should include only those departments whose second letter is an 'a'. It is important that the answer is not obtained by the use of the LIKE operator

| | Dep with second letter 'a' |
|---|----------------------------|
| 1 | Marketing |
| 2 | Sales |
| 3 | Manufacturing |
| 4 | Payroll |

4 rows returned

13. Correctly write an SQL statement that will display the name and surname of all employees (in one column) that have the term MAN in their job_id. The column should be named 'Managers'. Do not make use of the LIKE operator

| | Managers |
|---|----------------|
| 1 | Den Raphaely |
| 2 | Matthew Weiss |
| 3 | Adam Fripp |
| 4 | Payam Kaufling |
| 5 | Shanta Vollman |

....

12 rows returned

14. Write a query that will display two columns. The first column should be named 'Name & email' and should have the name, surname and email all in one column separated by a space. The second column should specify the location of the string 'san' in the value found in the first column. The second column should be named 'Position of san' and it should be also used to sort the values in descending order. The result should display only those employees whose email starts with an S.

| | Name & email | Position of san |
|---|--------------------------|-----------------|
| 1 | Sundar Ande SANDE | 13 |
| 2 | Susan Mavris SMAVRIS | 3 |
| 3 | Shelley Higgins SHIGGINS | 0 |
| 4 | Sundita Kumar SKUMAR | 0 |
| 5 | Sarah Bell SBELL | 0 |

....

13 rows returned

15. Write a query that will return the position of the first and second 'o' in the country name. If a country does not have an 'o' then both values should be set to 0. The columns should be named 'Country name', 'First 'o' position' and 'Second 'o' position'. You should sort your results using the last column and then the second column, both in descending order.

| | country_name | First 'o' position | Second 'o' position |
|---|--------------------------|--------------------|---------------------|
| 1 | HongKong | 2 | 6 |
| 2 | United States of America | 15 | 0 |
| 3 | United Kingdom | 13 | 0 |
| 4 | Singapore | 7 | 0 |
| 5 | Mexico | 6 | 0 |
| 6 | Nigeria | 0 | 0 |

....

25 rows returned

16. Write a query that will return the region name and another column which includes the first two letters of the region. You are not to use the SUBSTRING function

| | Region Name | Acronym |
|---|------------------------|---------|
| 1 | Europe | Eu |
| 2 | Americas | Am |
| 3 | Asia | As |
| 4 | Middle East and Africa | Mi |

4 rows returned

17. You are to write a query that will create a new postcode for the locations which have a country_id which is equal to IT. The query should display 3 columns; the current post code (Current Post Code), the city (City) and the new postcode (New Post Code). The new post code should be made up with the first letter of the city, followed by the last letter of the city and the current postcode. All the letters in the new postcode should be in capital letters.

| | Current Post Code | City | New Post Code |
|---|-------------------|--------|---------------|
| 1 | 00989 | Roma | RA00989 |
| 2 | 10934 | Venice | VE10934 |

2 rows returned

18. Write a query that will generate a password from available information in the employees table. The result of this statement should have one single column named 'Password'. The password should be generate by putting together the employee number in reverse, followed by an underscore, the email in reverse order and the first two digits of the salary

| | Password |
|------|----------------|
| 1 | 001_GNIKS24 |
| 2 | 101_RAHHCOKN17 |
| 3 | 201_NAAHEDL17 |
| 4 | 301_DLONUHA90 |
| 5 | 401_TSNREB60 |
| | |

107 rows returned

19. Modify the answer for question 18 such that wherever the number 0 is displayed this is changed to 9.

| | Password |
|------|----------------|
| 1 | 991_GNIKS24 |
| 2 | 191_RAHHCOKN17 |
| 3 | 291_NAAHEDL17 |
| 4 | 391_DLONUHA99 |
| 5 | 491_TSNREB69 |
| | |

107 rows returned

20. Write a query that will return the original job_id and a modified job_id. The modified job_id should change 'MGR' to 'MAN'

| | Original job_id | Modified job_id |
|---|-----------------|-----------------|
| 1 | AC_ACCOUNT | AC_ACCOUNT |
| 2 | AC_MGR | AC_MAN |
| 3 | AD_ASST | AD_ASST |
| 4 | AD PRES | AD PRES |
| 5 | AD_VP | AD_VP |

....

107 rows returned