* **Question 1**

Needs Grading

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | -- List all the countries that start with a letter entered by the user (prompt).  **NOTE: The user must enter a lowercase letter** |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | SELECT country\_name  FROM countries  WHERE lOWER(country\_name) like LOWER('&FirstLetter%');  Note: User input is letter 'a'  COUNTRY\_NAME  ----------------------------------------  Argentina  Australia | | Correct Answer: | Correct  old:SELECT \*  FROM countries  WHERE country\_name LIKE '&EnterLetter%'  new:SELECT \*  FROM countries  WHERE country\_name LIKE 'a%'   -- used lowercase a  no rows selected | | Response Feedback: | [None Given] | |  |  |  |

* **Question 2**

Needs Grading

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Display the (1) department number and (2) Highest, (3) Lowest and (4)Average pay per each department. Do not label the columns *.*Round the average.  Sort the output so that the department with highest average salary is shown first. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | SELECT  DEPARTMENT\_ID,          MAX(SALARY),          MIN(SALARY),          ROUND(AVG(SALARY))  FROM    EMPLOYEES  WHERE   DEPARTMENT\_ID IS NOT NULL  GROUP BY  DEPARTMENT\_ID  ORDER BY  AVG(SALARY) DESC;  DEPARTMENT\_ID MAX(SALARY) MIN(SALARY) ROUND(AVG(SALARY))  ------------- ----------- ----------- ------------------            90       24000       17000              19333            80       12000        7000              10558           110       12000        8300              10150            20       13000        6000               9500            60        9000        4200               6400            10        4400        4400               4400            50        5800        2500               3500  7 rows selected. | | Correct Answer: | Correct  90      24000 17000 19333  110    12000 8300  10150  80      11000 8600  10033  20      13000 6000  9500  (null) 7000  7000  7000  60      9000  4200  6400  10      4400  4400  4400  50      5800  2500  3500 | | Response Feedback: | [None Given] | |  |  |  |

* **Question 3**

Needs Grading

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | For each job ID display the job iD and total amount paid each month for this type of the job. Exclude titles *AD\_PRES* and *AD\_VP* and also include only jobs that require or exceed more than $15,000.    Sort the output so that top paid jobs are shown first. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | SELECT job\_id,          SUM(salary)  FROM employees  WHERE  job\_id NOT IN ('AD\_PRES','AD\_VP')  HAVING SUM(salary) > 15000  GROUP BY job\_id  ORDER BY SUM(salary) DESC;  JOB\_ID     SUM(SALARY)  ---------- -----------  SA\_REP          383600  IT\_PROG          19200 | | Correct Answer: | Correct  SELECT JOB\_ID, SUM(SALARY) AS "Sum" FROM EMPLOYEES GROUP BY JOB\_ID HAVING JOB\_ID != 'AD\_VP' AND JOB\_ID != 'AD\_PRES' AND SUM(SALARY) > 15000 ORDER BY STDDEV(SALARY);      JOB\_ID            Sum  ---------- ----------  SA\_REP         383600  IT\_PROG         19200 | | Response Feedback: | [None Given] | |  |  |  |

* **Question 4**

Needs Grading

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Display how many people work the same job in the same department.  Name these headings results as .... No.,     Job,     How Many*.*  Include only jobs that involve more than one person.  Sort the output so that jobs with the most people involved are shown first. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | SELECT department\_id   AS "No",  job\_id              AS "Job",          COUNT(employee\_id)   AS "How Many"  FROM employees  HAVING  COUNT(employee\_id) > 1  GROUP BY department\_id, job\_id  ORDER BY COUNT(employee\_id) DESC;            No Job          How Many  ---------- ---------- ----------          80 SA\_REP             35          50 ST\_CLERK            4          60 IT\_PROG             3             SA\_REP              2          90 AD\_VP               2 | | Correct Answer: | Correct  Will have different alias  50    5    5 80    3    3 90    3    3 60    3    3 20    2    2 110    2    2 | | Response Feedback: | [None Given] | |  |  |  |

* **Question 5**

Needs Grading

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | What date is the next Saturday from now |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | SELECT NEXT\_DAY(sysdate, 'Saturday') AS "NextSaturday"  FROM DUAL;    NextSaturday  ------------     29-SEP-18 | | Correct Answer: | Correct  SELECT  NEXT\_DAY(sysdate,'Saturday') AS "Next Saturday"      FROM dual | | Response Feedback: | [None Given] | |  |  |  |

* **Question 6**

Needs Grading

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | For each department show the latest and earliest hire date, BUT    - exclude departments 10,  30 and 40   - also exclude those departments where the last person was hired in this century (2000 plus).  - Sort the output so that the most recent, meaning latest hire dates, are shown first. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | /\* the first 3 line is used to set column header name \*/  column  department\_id  heading 'DepartmentID'  column  min(hire\_date) heading 'MinHireDate'  column max(hire\_date)  heading 'MaxHireDate'  SELECT department\_id,    MIN(hire\_date),          MAX(hire\_date)  FROM employees  WHERE department\_id NOT IN (10,30,40)  HAVING MAX(HIRE\_DATE) < '01-JAN-00'  GROUP BY department\_id  ORDER BY MAX(hire\_date) DESC;   DepartmentID MinHireDate MaxHireDate  ------------- ----------- -----------             50 17-OCT-95   16-NOV-99             60 03-JAN-90   07-FEB-99             20 17-FEB-96   17-AUG-97            110 07-JUN-94   07-JUN-94             90 17-JUN-87   13-JAN-93 | | Correct Answer: | Correct  Output needs fixing to handle --> hired in this century (2000 plus  select department\_id, min(hire\_date), max(hire\_date)  from employees  where department\_id NOT IN (10, 30, 40)  group by department\_id;  select department\_id, min(hire\_date), max(hire\_date) from employees where department\_id NOT IN (10, 30, 40) group by department\_id;  DEPARTMENT\_ID MIN(HIRE\_DATE) MAX(HIRE\_DATE)  ------------- -------------- --------------             20 17-FEB-96      17-AUG-97             50 17-OCT-95      16-NOV-99             60 03-JAN-90      07-FEB-99             80 11-MAY-96      27-JUL-17             90 17-JUN-87      13-JAN-93            110 07-JUN-94      07-JUN-94    6 rows selected | | Response Feedback: | [None Given] | |  |  |  |

* **Question 7**

Needs Grading

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Select dept. ID, job and count of number employees as long as there are more than 2 employees with that job in a department.  Sort by department then by job within department  EXTRA if you want to do it:  Display each department id with department name and highest salary in that department |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | SELECT department\_id AS "DepartmentID",         job\_id AS "Job",         COUNT(employee\_id) AS "EmpoyeeNum"  FROM   employees  GROUP BY department\_id, job\_id  HAVING COUNT(employee\_id) > 2  ORDER BY department\_id, "EmpoyeeNum" DESC;  DepartmentID Job        EmpoyeeNum  ------------ ---------- ----------            50 ST\_CLERK            4            60 IT\_PROG             3            80 SA\_REP             35 | | Correct Answer: | Correct       DEPARTMENT\_ID JOB\_ID       COUNT(\*) ------------- ---------- ----------            50 ST\_CLERK            4            60 IT\_PROG             3            80 SA\_REP             35  select  department\_id, job\_id, count(\*)  from employees  group by job\_id, department\_id  having count(\*) > 2  order by 1,2  -----------------------  Select d.department\_Id, department\_name, max(salary)  from employees E, departments D  where e.department\_id = d.department\_id  group by d.department\_id, department\_name  order by 1; | | Response Feedback: | [None Given] | |  |  |  |

* **Question 8**

Needs Grading

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | List all the countries and replace all letter "a"'s with a space. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | SELECT  REPLACE(country\_name, 'a', ' ') AS "CountryName"  FROM countries;  CountryName  --------------  Argentin  Austr li  Belgium  Br zil  C n d  Switzerl nd  Chin  Germ ny  Denm rk  Egypt  Fr nce  HongKong  CountryName    --------------  Isr el  Indi  It ly  J p n  Kuw it  Mexico  Nigeri  Netherl nds  Sing pore  United Kingdom  United St tes of Americ  Z mbi  CountryName    --------------  Zimb bwe  25 rows selected. | | Correct Answer: | Correct  SELECT  country\_name,  REPLACE(country\_name,'a',' ') AS  "New"  FROM countries;    Kuwait                                   Kuw it  Mexico                                   Mexico  Nigeria                                  Nigeri  Netherlands                              Netherl nds  Singapore                                Sing pore  United Kingdom                           United Kingdom  United States of America                 United St tes of Americ  Zambia                                   Z mbi  Zimbabwe                                 Zimb bwe | | Response Feedback: | [None Given] | |  |  |  |

* **Question 9**

Needs Grading

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | -- let's make the previous question easier for the user !!!  **SELECT \* FROM countries**  **WHERE UPPER(country\_name) LIKE UPPER('&EnterLetter%');**  **Try it with UPPER and LOWER to see the effect compared to previous question.**  **JUST ANSWER YES if you tried it.** |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Yes. | | Correct Answer: | Correct  Hopefully ... YES | | Response Feedback: | [None Given] | |  |  |  |

* **Question 10**

Needs Grading

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Calculate how many letters each country name has in it  and list them from most letters to least letters |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | SELECT country\_name AS "CountryName",         LENGTH(country\_name) AS "Letters"  FROM countries  ORDER BY "Letters" DESC;    CountryName                                 Letters  ---------------------------------------- ----------  United States of America                         24  United Kingdom                                   14  Netherlands                                      11  Switzerland                                      11  Argentina                                         9  Singapore                                         9  Australia                                         9  Zimbabwe                                          8  HongKong                                          8  Nigeria                                           7  Belgium                                           7  Denmark                                           7  CountryName                                 Letters  ---------------------------------------- ----------  Germany                                           7  Mexico                                            6  Kuwait                                            6  France                                            6  Canada                                            6  Brazil                                            6  Israel                                            6  Zambia                                            6  India                                             5  Egypt                                             5  China                                             5  Italy                                             5  CountryName                                 Letters  ---------------------------------------- ----------  Japan                                             5  25 rows selected. | | Correct Answer: | Correct  SELECT  country\_name, LENGTH(country\_name) as "No. of Characters"  FROM countries  ORDER BY "No. of Characters" DESC;  COUNTRY\_NAME                             No. of Characters  ---------------------------------------- -----------------  United States of America                                24  United Kingdom                                          14 Netherlands                                             11 Switzerland                                             11 Argentina                                                9 Singapore                                                9 Australia                                                9 Zimbabwe                                                 8 HongKong                                                 8 Nigeria                                                  7 Belgium                                                  7 Denmark                                                  7 Germany                                                  7 Mexico                                                   6 Kuwait                                                   6 France                                                   6 Canada                                                   6 Brazil                                                   6 Israel                                                   6 Zambia                                                   6 India                                                    5 Egypt                                                    5 China                                                    5 Italy                                                    5 Japan                                                    5   25 rows selected | | Response Feedback: | [None Given] | |  |  |  |

* **Question 11**

Needs Grading

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | For each manager number display how many persons he / she supervises. Exclude managers with numbers 100, 101 and 102 and also include only those managers that supervise more than 2 persons.  Sort the output so that manager numbers with the most supervised persons are shown first.  This is often on a test or a question like it. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | SELECT manager\_id AS "ManagerID",         COUNT(employee\_id) AS "Employees"  FROM employees  GROUP BY manager\_id  HAVING manager\_id NOT IN(100, 101, 102)         AND manager\_id IS NOT NULL         AND COUNT(employee\_id) > 2  ORDER BY "Employees" DESC;   ManagerID  Employees  ---------- ----------         149         37         124          4 | | Correct Answer: | [None] | | Response Feedback: | [None Given] | |  |  |  |

* **Question 12**

Needs Grading

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Show the date 10 days before today (today is not hard coded but is supplied by the system) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | SELECT (sysdate - 10) AS "10DaysAgo"  FROM DUAL;    10DaysAgo  ---------  17-SEP-18 | | Correct Answer: | Correct  SELECT sysdate - 10 AS "10 Days Ago"      FROM dual; | | Response Feedback: | [None Given] | |  |  |  |

* **Question 13**

Needs Grading

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Display the difference between the Average pay and Lowest pay in the company.  Name this result *The gap* |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | SELECT ROUND(AVG(salary) - MIN(salary), 2) AS "The gap"  FROM employees;     The gap  ----------     7361.11 | | Correct Answer: | Correct  SELECT AVG(salary)-MIN(salary) AS "The gap"  FROM employees;       The gap  ----------  7361.111111   --- you should round it for the user | | Response Feedback: | [None Given] | |  |  |  |