Recap Exercises 3

Question 1

From the following table, write a SQL query to locate the employees whose last name begins with the letter 'D'. Return emp_idno, emp_fname, emp_lname and emp_dept.

Sample table: emp_details

```
EMP_IDNO EMP_FNAME       EMP_LNAME         EMP_DEPT
--------- --------------- --------------- ----------
   127323 Michale         Robbin                  57
   526689 Carlos          Snares                  63
   843795 Enric           Dosio                   57
   328717 Jhon            Snares                  63
   444527 Joseph          Dosni                   47
   659831 Zanifer         Emily                   47
   847674 Kuleswar        Sitaraman               57
   748681 Henrey          Gabriel                 47
   555935 Alex            Manuel                  57
   539569 George          Mardy                   27
   733843 Mario           Saule                   63
   631548 Alan            Snappy                  27
   839139 Maria           Foster                  57
```

Sample Output:

```
emp_idno      emp_fname     emp_lname     emp_dept
843795        Enric         Dosio         57
444527        Joseph        Dosni         47
```

Question 2

From the following table, write a SQL query to find those customers who placed orders on October 5, 2012. Return customer_id, cust_name, city, grade, salesman_id, ord_no, purch_amt, ord_date, customer_id and salesman_id.

Sample table: salesman

```
salesman_id |    name    |   city   | commission
-------------+------------+----------+------------
        5001 | James Hoog | New York |       0.15
        5002 | Nail Knite | Paris    |       0.13
        5005 | Pit Alex   | London   |       0.11
        5006 | Mc Lyon    | Paris    |       0.14
        5007 | Paul Adam  | Rome     |       0.13
        5003 | Lauson Hen | San Jose |       0.12
```

Sample table: customer

```
customer_id |   cust_name    |    city    | grade | salesman_id
-------------+----------------+------------+-------+------------
-
        3002 | Nick Rimando   | New York   |   100 |        5001
        3007 | Brad Davis     | New York   |   200 |        5001
        3005 | Graham Zusi    | California |   200 |        5002
        3008 | Julian Green   | London     |   300 |        5002
        3004 | Fabian Johnson | Paris      |   300 |        5006
        3009 | Geoff Cameron  | Berlin     |   100 |        5003
        3003 | Jozy Altidor   | Moscow     |   200 |        5007
        3001 | Brad Guzan     | London     |       |        5005
```

Sample table: orders

```
ord_no      purch_amt   ord_date    customer_id  salesman_id
----------  ----------  ----------  -----------  -----------
70001       150.5       2012-10-05  3005         5002
70009       270.65      2012-09-10  3001         5005
70002       65.26       2012-10-05  3002         5001
70004       110.5       2012-08-17  3009         5003
70007       948.5       2012-09-10  3005         5002
70005       2400.6      2012-07-27  3007         5001
70008       5760        2012-09-10  3002         5001
70010       1983.43     2012-10-10  3004         5006
70003       2480.4      2012-10-10  3009         5003
70012       250.45      2012-06-27  3008         5002
```

```
70011        75.29        2012-08-17  3003          5007
70013        3045.6       2012-04-25  3002          5001
```

Sample Output:

```
customer_id  cust_name    city         grade  salesman_id  ord_no
      purch_amt    ord_date     customer_id  salesman_id
3002         Nick Rimando New York     100    5001         70002
      65.26        2012-10-05   3002         5001
3005         Graham Zusi  California   200    5002         70001
      150.50
```

Question 3

From the following tables, write a SQL query to find all the orders issued by the salesman 'Paul Adam'. Return ord_no, purch_amt, ord_date, customer_id and salesman_id.

Sample table: Salesman

salesman_id	name	city	commission
5001	James Hoog	New York	0.15
5002	Nail Knite	Paris	0.13
5005	Pit Alex	London	0.11
5006	Mc Lyon	Paris	0.14
5003	Lauson Hen	San Jose	0.12
5007	Paul Adam	Rome	0.13

Sample table: Orders

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150.5	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65.26	2012-10-05	3002	5001
70004	110.5	2012-08-17	3009	5003
70007	948.5	2012-09-10	3005	5002
70005	2400.6	2012-07-27	3007	5001
70008	5760	2012-09-10	3002	5001
70010	1983.43	2012-10-10	3004	5006
70003	2480.4	2012-10-10	3009	5003
70012	250.45	2012-06-27	3008	5002
70011	75.29	2012-08-17	3003	5007
70013	3045.6	2012-04-25	3002	5001

Question 4

From the following tables, write a SQL query to find all those salespeople and customers who are involved in the inventory management system. Return salesperson ID, customer ID.

Sample table: orders

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150.5	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65.26	2012-10-05	3002	5001
70004	110.5	2012-08-17	3009	5003
70007	948.5	2012-09-10	3005	5002
70005	2400.6	2012-07-27	3007	5001
70008	5760	2012-09-10	3002	5001
70010	1983.43	2012-10-10	3004	5006
70003	2480.4	2012-10-10	3009	5003
70012	250.45	2012-06-27	3008	5002
70011	75.29	2012-08-17	3003	5007
70013	3045.6	2012-04-25	3002	5001

Sample table: customer

customer_id	cust_name	city	grade	salesman_id
3002	Nick Rimando	New York	100	5001
3007	Brad Davis	New York	200	5001
3005	Graham Zusi	California	200	5002
3008	Julian Green	London	300	5002
3004	Fabian Johnson	Paris	300	5006
3009	Geoff Cameron	Berlin	100	5003
3003	Jozy Altidor	Moscow	200	5007
3001	Brad Guzan	London		5005

Sample Output:

salesman_id	customer_id
5005	3001
5007	3003
5001	3007
5002	3008
.....	

Question 5

From the following tables write a query in SQL to compare the purchasing status of the average purchase quantity of products of a category to the average pruchase quantity of the distributor. Return purchase month, category_id and purchase status.

Table: product

```
Field      |Type|Null|Key|Default|Extra|
-----------+----+----+---+-------+-----+
product_id |int |NO  |PRI|       |     |
category_id|int |NO  |   |       |     |
```

Data:

```
product_id|category_id|
----------+-----------+
      8001|        150|
      8002|        160|
      8003|        160|
      8004|        150|
      8005|        160|
```

Table: purchase

```
Field        |Type|Null|Key|Default|Extra|
-------------+----+----+---+-------+-----+
purchase_no  |int |NO  |PRI|       |     |
item_code    |int |NO  |MUL|       |     |
purchase_qty |int |YES |   |       |     |
purchase_date|date|YES |   |       |     |
```

Data:

```
purchase_no|item_code|purchase_qty|purchase_date|
-----------+---------+------------+-------------+
       1001|     8001|         240|   2019-12-17|
       1002|     8002|         150|   2019-12-17|
       1003|     8003|         175|   2020-11-15|
       1004|     8004|         150|   2019-12-17|
       1005|     8005|         145|   2019-12-05|
       1006|     8001|         150|   2020-01-05|
       1007|     8002|         200|   2020-01-15|
       1008|     8003|         150|   2020-12-17|
       1009|     8001|         200|   2020-01-28|
       1010|     8002|         180|   2020-02-07|
       1011|     8001|         300|   2020-02-25|
```

```
      1012|     8005|         100|   2020-01-27|
```

Output:

```
purchase_month|category_id|purchase_status|
--------------+-----------+---------------+
2019-12       |        150|increase       |
2020-01       |        150|increase       |
2020-02       |        150|increase       |
2019-12       |        160|decrease       |
2020-01       |        160|decrease       |
2020-02       |        160|decrease       |
2020-11       |        160|remain same    |
2020-12       |        160|remain same    |
```

Question 6

Consider the Employee table below.

Emp_Id	Emp_name	Salary	Manager_Id
10	Anil	50000	18
11	Vikas	75000	16
12	Nisha	40000	18
13	Nidhi	60000	17
14	Priya	80000	18
15	Mohit	45000	18
16	Rajesh	90000	–
17	Raman	55000	16
18	Santosh	65000	17

Write a query to generate below output:

Manager_Id	Manager	Average_Salary_Under_Manager
16	**Rajesh**	**65000**
17	**Raman**	**62500**
18	**Santosh**	**53750**

Question 7

Use the purchase_order_ tab and the purchase_order_line_tab defined in the Apps 10 environment to build-up the queries for the below.

a. List all the rows from the purchase_order_ tab
b. List all the rows from the purchase_order_ line_tab
c. Identify the purchase order lines where the purchase order Rowstate = 'Received' or 'Released'.
d. Identify the purchase orders having more than 2 purchase order lines.

Question 8

Use the inventory_part_tab defined in the Apps 10 environment to build-up the queries for the below.

a. List the PART_NO, DESCRIPTION, CONTRACT, TYPE_CODE, PLANNER_BUYER, UNIT_MEAS, PART_STATUS of all the records from the inventory_part_tab.
b. Find the number of parts for each part type.

Question 9

Use the below tables and answer the questions.

emp (eno, ename, bdate, title, salary, dno)

proj (pno, pname, budget, dno)

dept (dno, dname, mgreno)

workson (eno, pno, resp, hours)

1) Write an SQL query that returns the project number and name for projects with a budget greater than $100,000.

2) Write an SQL query that returns all works on records where hours worked is less than 10 and the responsibility is 'Manager'.

3) Write an SQL query that returns the employees (number and name only) who have a title of 'EE' or 'SA' and make more than $35,000.

4) Write an SQL query that returns the employees (name only) in department 'D1' ordered by decreasing salary.

5) Write an SQL query that returns the departments (all fields) ordered by ascending department name.

6) Write an SQL query that returns the employee name, department name, and employee title.

7) Write an SQL query that returns the project name, hours worked, and project number for all works on records where hours > 10.

8) Write an SQL query that returns the project name, department name, and budget for all projects with a budget < $50,000.

9) Write an SQL query that returns the employee numbers and salaries of all employees in the 'Consulting' department ordered by descending salary.

10) Write an SQL query that returns the employee name, project name, employee title, and hours for all works on records.