

1. Write and type the names of all the employees in department 1?

```
SELECT EmployeeName
FROM employee
WHERE DepartmentID = 1;
```

EmployeeName
Alice

1 Row Returned

2. Find the items sold by at least two departments on the second floor

```
SELECT ItemName
FROM item
WHERE ItemID IN (SELECT ItemID
                  FROM sale sl, department dt
                  WHERE sl.DepartmentID = dt.DepartmentID AND DepartmentFloor = 2
                  GROUP BY ItemID
                  HAVING COUNT(DISTINCT dt.DepartmentID) > 1);
```

ItemName
Pocket knife - Nile
Sextant

2 Rows Returned

3. List the departments having an average salary of over 25000.

```
SELECT dt.DepartmentID, dt.DepartmentName, ROUND(AVG(e.EmployeeSalary),2) AS  
'Average_Salary'
```

```
FROM department dt JOIN employee e
```

```
ON dt.DepartmentID = e.DepartmentID
```

```
GROUP BY dt.DepartmentID
```

```
HAVING Average_Salary > 25000;
```

DepartmentID	DepartmentName	Average_Salary
1	Management	75000.00
2	Accounting	30000.00
9	Purchasing	49500.00
10	Personnel	35000.00
11	Marketing	30666.67

5 Rows Returned

4. Find the numbers and names of the employees who earn more than their manager

```
SELECT e.EmployeeID, e.EmployeeName
```

```
FROM employee e, employee m
```

```
WHERE e.BossID = m.EmployeeID AND m.EmployeeSalary < e.EmployeeSalary;
```

EmployeeID	EmployeeName
8	Sarah

1 Row Returned

5. Type the query to find the average salary of employees in the Clothes department

```
SELECT dt.DepartmentName, ROUND(AVG(e.EmployeeSalary),2) AS 'Average_Salary'  
FROM department dt JOIN employee e  
ON dt.DepartmentID = e.DepartmentID  
WHERE DepartmentName = 'Clothes';
```

DepartmentName	Average_Salary
Clothes	16000.00

1 Row Returned

6. List the name and salary of the managers with more than 2 employees

```
SELECT EmployeeName AS 'Manager', ROUND(EmployeeSalary,2) AS 'Salary'  
FROM employee  
WHERE EmployeeID IN (SELECT BossID  
                      FROM employee  
                      GROUP BY BossID  
                      HAVING COUNT(BossID) > 2);
```

Manager	Salary
Alice	75000.00
Andrew	25000.00
Clare	22000.00

3 Rows Returned

7. Find the supplier id and supplier names that deliver compasses

```
SELECT DISTINCT sr.SupplierID, sr.SupplierName
FROM item i JOIN supplier sr JOIN delivery dy
ON i.ItemID = dy.ItemID AND dy.SupplierID = sr.SupplierID
WHERE i.ItemName = 'Compass'
ORDER BY SupplierID;
```

SupplierID	SupplierName
101	Global Books & Maps
102	Nepalese Corp.
103	All Sports Manufacturing
105	All Points_ Inc.

4 Rows Returned

8. Write and type the query that finds the name and salary of Clare's manager

```
SELECT EmployeeName, ROUND(EmployeeSalary,2) AS 'Salary'
FROM employee
WHERE EmployeeID IN (SELECT BossID
                     FROM employee
                     WHERE EmployeeName = 'Clare');
```

EmployeeName	Salary
Ned	45000.00

1 Row Returned

9. Whom does Todd manage?

```
SELECT EmployeeName
FROM employee
WHERE BossID IN (SELECT EmployeeID
                  FROM employee
                  WHERE EmployeeName = 'Todd');
```

EmployeeName
Nancy

1 Row Returned

10. Find the departments that have never sold a geo positioning system

```
SELECT DepartmentName
FROM department
WHERE DepartmentID NOT IN (SELECT sl.DepartmentID
                           FROM sale sl JOIN item i
                           ON sl.ItemID = i.ItemID
                           JOIN sale sl2
                           ON sl.SaleID = sl2.SaleID
                           JOIN Department dt
                           ON sl2.DepartmentID = dt.DepartmentID
                           WHERE i.ItemName = 'Geo positioning system');
```

DepartmentName
Management
Accounting
Clothes
Equipment
Furniture
Recreation
Purchasing
Personnel
Marketing

9 Rows Returned

11. Find, for each item, the total quantity sold by the departments on the second floor

```
SELECT i.ItemName, SUM(SaleQTY) AS 'Sale Quantity'
FROM item i, sale sl, department dt
WHERE i.ItemID = sl.ItemID AND dt.DepartmentID = sl.DepartmentID AND DepartmentFloor = 2
GROUP BY ItemName;
```

ItemName	Sale Quantity
Boots - snakeproof	2
Pith helmet	1
Hat - polar explorer	3
Pocket knife - Nile	2
Sextant	2
Elephant polo stick	1
Camel saddle	1

7 Rows Returned

12. Who earns the lowest salary?

```
SELECT EmployeeID, EmployeeName
FROM employee
WHERE EmployeeSalary = (SELECT MIN(EmployeeSalary)
                        FROM employee);
```

EmployeeID	EmployeeName
14	Paul

1 Row Returned

13. Find, for each department on the second floor, the average salary of the employees

```
SELECT dt.DepartmentName, ROUND(AVG(e.EmployeeSalary),2) AS 'Average Salary'  
FROM department dt join employee e  
ON dt.DepartmentID = e.DepartmentID  
WHERE DepartmentFloor= 2  
GROUP BY DepartmentName;
```

DepartmentName	Average Salary
Clothes	16000.00
Recreation	15000.00

2 Rows Returned

14. Find the first name of Sophie's boss.

```
SELECT EmployeeName  
FROM employee  
WHERE EmployeeID = (SELECT BossID  
                     FROM employee  
                     WHERE EmployeeName ='Sophie');
```

EmployeeName
Alice

1 Row Returned

15. Find bosses who are in the same department as their employees

```
SELECT DISTINCT b.EmployeeName
```

```
FROM employee e, employee b
```

```
WHERE e.BossID = b.EmployeeID AND e.DepartmentID = b.DepartmentID;
```

EmployeeName
Ned
Todd
Brier

3 Rows Returned