Sql Script with their OUTPUT

```
CREATE TABLE EmployeeSales (
    SaleID INT PRIMARY KEY,
    EmployeeID INT,
    Department VARCHAR(50),
    SaleAmount DECIMAL(10, 2),
    SaleDate DATE

--Step 2) Insert records into the table
INSERT INTO EmployeeSales (SaleID, EmployeeID, Department, SaleAmount, SaleDate)
VALUES
(1, 101, 'Electronics', 500.00, '2023-08-01'),
(2, 102, 'Electronics', 300.00, '2023-08-03'),
(3, 101, 'Furniture', 150.00, '2023-08-02'),
(4, 103, 'Electronics', 250.00, '2023-08-04'),
(5, 104, 'Furniture', 200.00, '2023-08-02'),
(6, 101, 'Furniture', 450.00, '2023-08-05'),
(7, 102, 'Electronics', 700.00, '2023-08-05'),
(8, 103, 'Furniture', 100.00, '2023-08-06');

select * from EmployeeSales
```

SaleID	EmployeeID	Department	SaleAmoun	SaleDate
1	101	Electronics	500.00	2023-08-01
2	102	Electronics	300.00	2023-08-03
3	101	Furniture	150.00	2023-08-02
4	103	Electronics	250.00	2023-08-04
5	104	Furniture	200.00	2023-08-02

6 101 Furniture 450.00 2023-08-05

7 102 Electronics 700.00 2023-08-05

8 103 Furniture 100.00 2023-08-06

select Department,sum(SaleAmount) as totalsales from EmployeeSales

group by Department

Electronics 1750.00

Furniture 900.00

--2) Write a query to count the number of sales made by each employee.

select EmployeeID,count(SaleID) as salescount from EmployeeSales

group by EmployeeID

EmployeeID salescount

101 3

102 2

103 2

104 1

--3) Write a query to calculate the average sale amount for each department.

select Department,avg(SaleAmount) as totalsales from EmployeeSales

group by Department

Department totalsales

Electronics 437.500000

Furniture 225.000000

--4) Write a query to find the total sales amount for each employee, but only include employees who have made more than one sale.

```
select EmployeeID,sum(SaleAmount) as totalsale from EmployeeSales
group by EmployeeID
HAVING COUNT(SaleID) > 1;
```

EmployeeID	totalsale
101	1100.00
102	1000.00
103	350.00

```
--5) Write a query to find the total sales for each month in 2023.
select month(SaleDate)as month,sum(SaleAmount) as totalsales from EmployeeSales
where year(SaleDate)=2023
group by month(SaleDate)
```

month	totalsales
8	2650.00

```
 CREATE TABLE Employees (
    EmployeeID INT PRIMARY KEY,
    FirstName NVARCHAR(50),
    LastName NVARCHAR(50),
    Email NVARCHAR(100) UNIQUE,
    DepartmentID INT,
    HireDate DATE,
    Salary DECIMAL(10, 2)
);

INSERT INTO Employees (EmployeeID, FirstName, LastName, Email, DepartmentID, HireDate,
Salary)
```

```
VALUES
(1, 'John', 'Smith', 'john.smith@example.com', 101, '2021-06-15', 75000.00),
(2, 'Jane', 'Doe', 'jane.doe@example.com', 102, '2020-03-10', 85000.00),
(3, 'Michael', 'Johnson', 'michael.johnson@example.com', 101, '2019-11-22', 95000.00),
(4, 'Emily', 'Davis', 'emily.davis@example.com', 103, '2022-01-05', 68000.00),
(5, 'William', 'Brown', 'william.brown@example.com', 102, '2018-07-19', 80000.00);

-- Creating the Departments table
CREATE TABLE Departments (
    DepartmentID INT PRIMARY KEY,
    DepartmentName NVARCHAR(100)
);

-- Inserting data into the Departments table
INSERT INTO Departments (DepartmentID, DepartmentName)
VALUES
(101, 'Human Resources'),
(102, 'Finance'),
(103, 'IT');

select * from Departments
DepartmentID      DepartmentName
101                    Human Resources
102                        Finance
103                           IT
```

---1) Write a SQL query to list the names of employees along with the names of the departments they work in.

```
select E.FirstName, E.LastName, D.DepartmentName

from Employees E

join Departments D

on E.DepartmentID=D.DepartmentID
```

FirstName	LastName	DepartmentName
John	Smith	Human Resources
Jane	Doe	Finance
Michael	Johnson	Human Resources
Emily	Davis	IT
William	Brown	Finance

---2) Write a SQL query to list all the departments and the employees working in them, including departments with no employees.

```
select D.DepartmentName, E.FirstName, E.LastName

from Departments D

left join Employees E

on E.DepartmentID=D.DepartmentID
```

DepartmentName	FirstName	LastName
Human Resources	John	Smith
Human Resources	Michael	Johnson
Finance	Jane	Doe
Finance	William	Brown
IT	Emily	Davis

---3) Write a SQL query to find the names of employees who do not belong to any department (i.e., no matching department ID).

```
select E.FirstName, E.LastName
from Employees E
 left join Departments D
on E.DepartmentID=D.DepartmentID
where D.DepartmentID is Null
```

---4) Write a SQL query to list the names of employees who work in the same department as 'Jane Doe'.

```
SELECT E2.FirstName, E2.LastName
FROM Employees E1
JOIN Employees E2
ON E1.DepartmentID = E2.DepartmentID
WHERE E1.FirstName = 'Jane' AND E1.LastName = 'Doe'
AND E2.EmployeeID <> E1.EmployeeID;
```

FirstName	LastName
William	Brown

---5) Write a SQL query to find the department with the highest total salary paid to its employees.

```
select top 1 D.DepartmentName
from Departments D
join Employees E
on D.DepartmentID=E.EmployeeID
group by D.DepartmentName
order by sum(E.Salary) desc
```