

```

97 -----Data Cleaning and Preprocessing-----
98 -----
99 -----
100 -- Step 1: Identify Missing Data
101 -- Count missing values in each table
102 SELECT 'Employee' AS TableName, COUNT(*) AS MissingCount
103 FROM Employee
104 WHERE EmployeeID IS NULL OR JobRole IS NULL OR Gender IS NULL;
105
106 SELECT 'PerformanceRating' AS TableName, COUNT(*) AS MissingCount
107 FROM PerformanceRating
108 WHERE PerformanceID IS NULL OR EmployeeID IS NULL;
109
110 SELECT 'EducationLevel' AS TableName, COUNT(*) AS MissingCount
111 FROM EducationLevel
112 WHERE EducationLevelID IS NULL OR EducationLevel IS NULL;
113
114 SELECT 'RatingLevel' AS TableName, COUNT(*) AS MissingCount
115 FROM RatingLevel
116 WHERE RatingID IS NULL OR RatingLevel IS NULL;
117
118 SELECT 'SatisfiedLevel' AS TableName, COUNT(*) AS MissingCount
119 FROM SatisfiedLevel
120 WHERE SatisfactionID IS NULL OR SatisfactionLevel IS NULL;
121
    
```

Results Messages

	TableName	MissingCount
1	Employee	0

	TableName	MissingCount
1	PerformanceRating	0

	TableName	MissingCount
1	EducationLevel	0

	TableName	MissingCount
1	RatingLevel	0

	TableName	MissingCount
1	SatisfiedLevel	0

```

122  -- Step 2: Identify Duplicates
123  -- Find duplicates by primary key in each table
124  SELECT EmployeeID, COUNT(*)
125  FROM Employee
126  GROUP BY EmployeeID
127  HAVING COUNT(*) > 1;
128
129  SELECT PerformanceID, EmployeeID, COUNT(*)
130  FROM PerformanceRating
131  GROUP BY PerformanceID, EmployeeID
132  HAVING COUNT(*) > 1;
133
134  SELECT EducationLevelID, COUNT(*)
135  FROM EducationLevel
136  GROUP BY EducationLevelID
137  HAVING COUNT(*) > 1;
138
139  SELECT RatingID, COUNT(*)
140  FROM RatingLevel
141  GROUP BY RatingID
142  HAVING COUNT(*) > 1;
143
144  SELECT SatisfactionID, COUNT(*)
145  FROM SatisfiedLevel
146  GROUP BY SatisfactionID
147  HAVING COUNT(*) > 1;
148
149  ----- Ending of Week 1: Build Data Model, Data Cleaning and Preprocessing

```

Results **Messages**

EmployeeID	(No column nam...
------------	-------------------

PerformanceID	EmployeeID	(No column nam...
---------------	------------	-------------------

EducationLevel...	(No column nam...
-------------------	-------------------

RatingID	(No column nam...
----------	-------------------

SatisfactionID	(No column nam...
----------------	-------------------