Experiment 9 Output

This experiment involves designing and executing SQL queries to generate insightful reports from a data warehouse, utilizing business intelligence tools for data analysis and visualization.

Creating Database and Data Table

```
mysql> -- Create the database and table
mysql> CREATE DATABASE linkedin_data;
Query OK, 1 row affected (0.05 sec)

mysql> USE linkedin_data;
Database changed
mysql>
mysql> CREATE TABLE users (
    ->     id INT AUTO_INCREMENT PRIMARY KEY,
    ->     name VARCHAR(255),
    ->     followers INT,
    ->     content_type VARCHAR(100),
    ->     gender VARCHAR(10),
    ->     age INT,
    ->     organization VARCHAR(255)
    -> );
Query OK, 0 rows affected (0.05 sec)
```

Fig 1: Database and Table Creation

Inserting Data Via SQL and Python

```
mysql> INSERT INTO users (name, followers, content_type, gender, age, c
    -> ('Alice Johnson', 8500, 'Blog', 'Female', 28, 'Google'),
    -> ('Bob Smith', 4300, 'Video', 'Male', 35, 'Microsoft'),
    -> ('Charlie Brown', 9200, 'Article', 'Male', 41, 'Amazon'),
    -> ('David Lee', 1200, 'Post', 'Male', 24, 'Meta'),
    -> ('Emily Davis', 6700, 'Infographic', 'Female', 30, 'Tesla'),
    -> ('Fatima Khan', 3100, 'Video', 'Female', 27, 'OpenAI'),
    -> ('George Martin', 1500, 'Blog', 'Male', 37, 'Google'),
    -> ('Hannah White', 4900, 'Post', 'Female', 22, 'Microsoft'),
    -> ('Ivan Petrov', 7400, 'Article', 'Male', 45, 'Amazon'),
    -> ('Jasmine Li', 6100, 'Infographic', 'Female', 33, 'Meta');
Query OK, 10 rows affected (0.00 sec)
Records: 10  Duplicates: 0  Warnings: 0
```

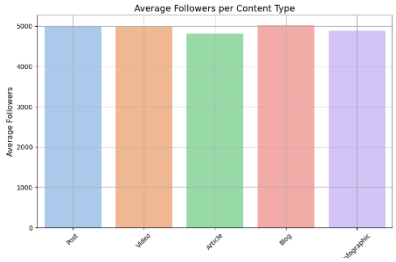
```python
# Insert More Varied Data
insert_query = """
    INSERT INTO users (name, followers, content_type, gender, age, organization)
    VALUES (%s, %s, %s, %s, %s, %s)
"""

new_data = [
    ("Sophia Williams", 7200, "Blog", "Female", 29, "Google"),
    ("Liam Johnson", 8500, "Video", "Male", 31, "Tesla"),
    ("Olivia Brown", 5200, "Article", "Female", 27, "Amazon"),
    ("Noah Wilson", 6600, "Post", "Male", 34, "Microsoft"),
    ("Emma Garcia", 9400, "Infographic", "Female", 26, "Meta"),
    ("William Lee", 7800, "Blog", "Male", 38, "OpenAI"),
    ("Ava Anderson", 3100, "Video", "Female", 25, "Google"),
    ("James Martinez", 5600, "Post", "Male", 45, "Microsoft"),
    ("Isabella Taylor", 6800, "Article", "Female", 33, "Amazon"),
    ("Mason Thomas", 5900, "Infographic", "Male", 28, "Meta")
]

cursor.executemany(insert_query, new_data)
db.commit()
print(f"✅ {cursor.rowcount} new records inserted.")
```

Fig 2: Data Insertion

Followers Distribution



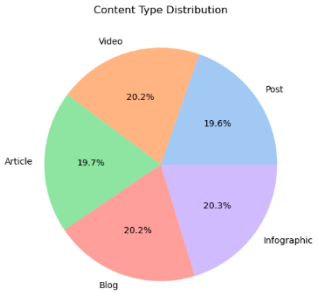
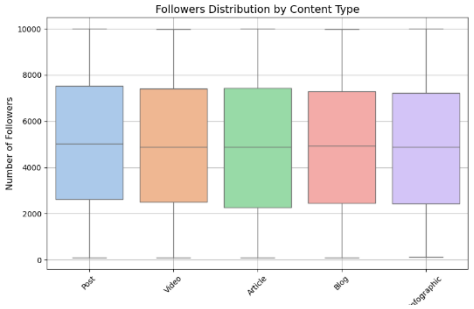
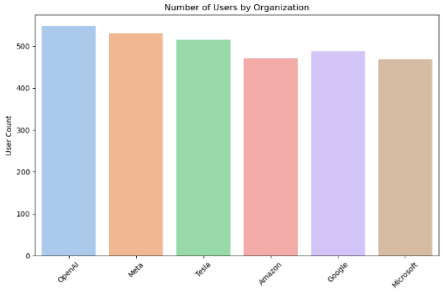
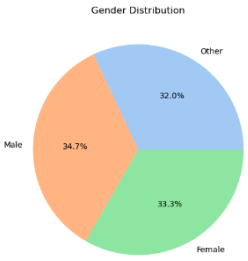


Fig 3: Followers Distribution Graph

Box Plot







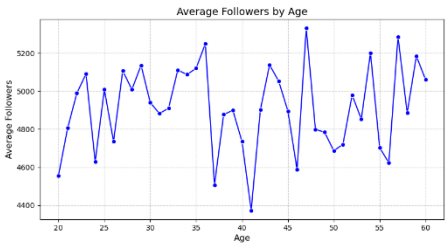


Fig 4: Company and Users Distribution

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