# Coding Challenge 2

1. Creating Database:

```
mysql> create database job_board;
Query OK, 1 row affected (0.01 sec)

mysql> use job_board
Database changed
```

2.Create Tables:

3.Define appropriate primary keys, Foreign key and constraints

```
mysql> CREATE TABLE Companies (
    ->     CompanyID INT PRIMARY KEY,
    ->     CompanyName VARCHAR(255),
    ->     Location VARCHAR(255)
    -> );
Query OK, 0 rows affected (0.02 sec)

mysql>
mysql> -- Create Jobs Table
mysql> CREATE TABLE Jobs (
    ->     JobID INT PRIMARY KEY,
    ->     CompanyID INT,
    ->     JobTitle VARCHAR(255),
    ->     JobDescription TEXT,
    ->     JobLocation VARCHAR(255),
    ->     Salary DECIMAL(10, 2),
    ->     JobType VARCHAR(50),
    ->     PostedDate DATETIME,
    ->     FOREIGN KEY (CompanyID) REFERENCES Companies(CompanyID)
    -> );
Query OK, 0 rows affected (0.02 sec)

mysql>
mysql> -- Create Applicants Table
mysql> CREATE TABLE Applicants (
    ->     ApplicantID INT PRIMARY KEY,
    ->     FirstName VARCHAR(255),
    ->     LastName VARCHAR(255),
    ->     Email VARCHAR(255),
    ->     Phone VARCHAR(20),
    ->     Resume TEXT
    -> );
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> -- Create Applications Table
mysql> CREATE TABLE Applications (
    ->     ApplicationID INT PRIMARY KEY,
    ->     JobID INT,
    ->     ApplicantID INT,
    ->     ApplicationDate DATETIME,
    ->     CoverLetter TEXT,
    ->     FOREIGN KEY (JobID) REFERENCES Jobs(JobID),
    ->     FOREIGN KEY (ApplicantID) REFERENCES Applicants(ApplicantID)
    -> );
Query OK, 0 rows affected (0.03 sec)
```

Inserting Values:

```
mysql> INSERT INTO Companies (CompanyID, CompanyName, Location)
    -> VALUES
    -> (1, 'Tech Solutions', 'Chennai'),
    -> (2, 'Innovate Systems', 'Bangalore'),
    -> (3, 'Digital Creations', 'Hyderabad'),
    -> (4, 'Data Dynamics', 'Chennai'),
    -> (5, 'Smart Innovations', 'Bangalore'),
    -> (6, 'CodeCrafters', 'Hyderabad'),
    -> (7, 'FutureTech', 'Chennai'),
    -> (8, 'Infinite Ideas', 'Bangalore'),
    -> (9, 'Vibrant Visions', 'Hyderabad'),
    -> (10, 'TechGenius', 'Chennai');
Query OK, 10 rows affected (0.01 sec)
Records: 10  Duplicates: 0  Warnings: 0
```

```
mysql> INSERT INTO Jobs (JobID, CompanyID, JobTitle, JobDescription, JobLocation, Salar
y, JobType, PostedDate)
    -> VALUES
    -> (1, 1, 'Software Engineer', 'Develop and maintain software applications.', 'Chen
nai', 80000.00, 'Full-time', '2023-01-10 08:00:00'),
    -> (2, 2, 'Data Scientist', 'Analyze and interpret complex data sets.', 'Bangalore'
, 100000.00, 'Full-time', '2023-01-15 10:30:00'),
    -> (3, 3, 'UX Designer', 'Create user-centered designs for digital products.', 'Hyd
erabad', 90000.00, 'Contract', '2023-01-20 12:45:00'),
    -> (4, 4, 'Web Developer', 'Build and maintain responsive web applications.', 'Chen
nai', 75000.00, 'Full-time', '2023-02-05 09:00:00'),
    -> (5, 5, 'AI Engineer', 'Develop AI models for innovative solutions.', 'Bangalore'
, 120000.00, 'Contract', '2023-02-10 11:15:00'),
    -> (6, 6, 'Mobile App Developer', 'Create mobile applications for iOS and Android.'
, 'Hyderabad', 85000.00, 'Full-time', '2023-02-15 13:30:00'),
    -> (7, 7, 'Network Administrator', 'Manage and optimize company networks.', 'Chenna
i', 90000.00, 'Full-time', '2023-03-01 08:30:00'),
    -> (8, 8, 'Database Analyst', 'Design and maintain databases for efficient data sto
rage.', 'Bangalore', 95000.00, 'Contract', '2023-03-08 10:45:00'),
    -> (9, 9, 'Graphic Designer', 'Create visually appealing graphics and designs.', 'H
yderabad', 80000.00, 'Full-time', '2023-03-15 12:00:00'),
    -> (10, 10, 'Cybersecurity Analyst', 'Protect company systems from cyber threats.',
 'Chennai', 110000.00, 'Full-time', '2023-03-20 14:15:00');
Query OK, 10 rows affected (0.00 sec)
Records: 10  Duplicates: 0  Warnings: 0
```

```
mysql> INSERT INTO Applications (ApplicationID, JobID, ApplicantID, ApplicationDate, Co
verLetter)
    -> VALUES
    -> (1, 1, 2, '2023-01-12 09:15:00', 'I am excited about the opportunity to contribu
te my skills to the Software Engineer role at Tech Solutions.'),
    -> (2, 2, 1, '2023-01-16 11:00:00', 'As a Data Scientist, I have successfully led d
ata-driven projects, and I am eager to bring my expertise to Innovate Systems.'),
    -> (3, 3, 3, '2023-01-22 13:30:00', 'I am enthusiastic about the UX Designer positi
on at Digital Creations and believe my creative skills align well with the role.'),
    -> (4, 4, 4, '2023-02-07 10:00:00', 'I am interested in the Web Developer role at D
ata Dynamics and bring a strong background in front-end and back-end technologies.'),
    -> (5, 5, 5, '2023-02-12 12:15:00', 'Having a strong foundation in artificial intel
ligence, I am eager to contribute to the innovative projects at Smart Innovations as an
 AI Engineer.'),
    -> (6, 6, 6, '2023-02-17 14:30:00', 'I am excited about the opportunity to develop
mobile applications for CodeCrafters, leveraging my experience in iOS and Android app d
evelopment.'),
    -> (7, 7, 7, '2023-03-03 09:30:00', 'I am applying for the Network Administrator po
sition at FutureTech, bringing my expertise in managing and optimizing company networks
.'),
    -> (8, 8, 8, '2023-03-10 11:45:00', 'I am interested in the Database Analyst role a
t Infinite Ideas and am confident in my ability to design and maintain efficient databa
ses.'),
    -> (9, 9, 9, '2023-03-17 13:00:00', 'As a graphic designer, I am eager to contribut
e my creative skills to Vibrant Visions and create visually appealing designs for digit
al products.'),
    -> (10, 1, 3, '2023-01-25 15:45:00', 'I am applying for the Software Engineer posit
ion at Tech Solutions. My programming skills and passion for innovative solutions align
 well with the company's goals.');
Query OK, 10 rows affected (0.00 sec)
Records: 10  Duplicates: 0  Warnings: 0
```

Tasks:

5. Write an SQL query to count the number of applications received for each job listing in the "Jobs" table. Display the job title and the corresponding application count. Ensure that it lists all jobs, even if they have no applications.

```
mysql> SELECT Jobs.JobTitle, COUNT(Applications.ApplicationID) AS ApplicationCount
    -> FROM Jobs
    -> LEFT JOIN Applications ON Jobs.JobID = Applications.JobID
    -> GROUP BY Jobs.JobID, Jobs.JobTitle;
+----------------------+------------------+
| JobTitle             | ApplicationCount |
+----------------------+------------------+
| Software Engineer    |                2 |
| Data Scientist       |                1 |
| UX Designer          |                1 |
| Web Developer        |                1 |
| AI Engineer          |                1 |
| Mobile App Developer |                1 |
| Network Administrator|                1 |
| Database Analyst     |                1 |
| Graphic Designer     |                1 |
| Cybersecurity Analyst|                0 |
+----------------------+------------------+
10 rows in set (0.02 sec)
```

6. Develop an SQL query that retrieves job listings from the "Jobs" table within a specified salary range. Allow parameters for the minimum and maximum salary values. Display the job title, company

name, location, and salary for each matching job.

```
mysql> SELECT Jobs.JobTitle, Companies.CompanyName, Jobs.JobLocation, Jobs.Salary
    -> FROM Jobs
    -> JOIN Companies ON Jobs.CompanyID = Companies.CompanyID
    -> WHERE Jobs.Salary BETWEEN 10000 AND 100000;
+----------------------+-------------------+-------------+-----------+
| JobTitle             | CompanyName       | JobLocation | Salary    |
+----------------------+-------------------+-------------+-----------+
| Software Engineer    | Tech Solutions    | Chennai     |  80000.00 |
| Data Scientist       | Innovate Systems  | Bangalore   | 100000.00 |
| UX Designer          | Digital Creations | Hyderabad   |  90000.00 |
| Web Developer        | Data Dynamics     | Chennai     |  75000.00 |
| Mobile App Developer | CodeCrafters      | Hyderabad   |  85000.00 |
| Network Administrator | FutureTech       | Chennai     |  90000.00 |
| Database Analyst     | Infinite Ideas    | Bangalore   |  95000.00 |
| Graphic Designer     | Vibrant Visions   | Hyderabad   |  80000.00 |
+----------------------+-------------------+-------------+-----------+
8 rows in set (0.00 sec)
```

7. Write an SQL query that retrieves the job application history for a specific applicant. Allow a parameter for the ApplicantID, and return a result set with the job titles, company names, and application dates for all the jobs the applicant has applied to.

```
mysql> SELECT Jobs.JobTitle, Companies.CompanyName, Applications.ApplicationDate
    -> FROM Applications
    -> JOIN Jobs ON Applications.JobID = Jobs.JobID
    -> JOIN Companies ON Jobs.CompanyID = Companies.CompanyID
    -> WHERE Applications.ApplicantID = 1;
+----------------+------------------+---------------------+
| JobTitle       | CompanyName      | ApplicationDate     |
+----------------+------------------+---------------------+
| Data Scientist | Innovate Systems | 2023-01-16 11:00:00 |
+----------------+------------------+---------------------+
1 row in set (0.00 sec)
```

8. Create an SQL query that calculates and displays the average salary offered by all companies for job listings in the "Jobs" table. Ensure that the query filters out jobs with a salary of zero.

```
mysql> SELECT AVG(Salary) AS AverageSalary
    -> FROM Jobs
    -> WHERE Salary > 0;
+---------------+
| AverageSalary |
+---------------+
|  92500.000000 |
+---------------+
1 row in set (0.00 sec)
```

9. Write an SQL query to identify the company that has posted the most job listings. Display the company name along with the count of job listings they have posted. Handle ties if multiple companies have the same maximum count.

```
mysql> SELECT Companies.CompanyName, COUNT(Jobs.JobID) AS JobCount
    -> FROM Companies
    -> LEFT JOIN Jobs ON Companies.CompanyID = Jobs.CompanyID
    -> GROUP BY Companies.CompanyID
    -> ORDER BY JobCount DESC
    -> LIMIT 1;
+---------------+----------+
| CompanyName    | JobCount |
+---------------+----------+
| Tech Solutions |        1 |
+---------------+----------+
1 row in set (0.00 sec)
```

10. Find the applicants who have applied for positions in companies located in 'CityX' and have at least 3 years of experience.

```
mysql> SELECT DISTINCT Applicants.ApplicantID, Applicants.FirstName, Applicants.LastNam
e
    -> FROM Applicants
    -> JOIN Applications ON Applicants.ApplicantID = Applications.ApplicantID
    -> JOIN Jobs ON Applications.JobID = Jobs.JobID
    -> JOIN Companies ON Jobs.CompanyID = Companies.CompanyID
    -> WHERE Companies.Location = @City
    ->     AND DATEDIFF(NOW(), Applicants.ExperienceStartDate) >= 1095;
```

11. Retrieve a list of distinct job titles with salaries between $60,000 and $80,000.

```
mysql> SELECT DISTINCT JobTitle, Salary
    -> FROM Jobs
    -> WHERE Salary BETWEEN 60000 AND 80000;
+-------------------+----------+
| JobTitle          | Salary   |
+-------------------+----------+
| Software Engineer | 80000.00 |
| Web Developer     | 75000.00 |
| Graphic Designer  | 80000.00 |
+-------------------+----------+
3 rows in set (0.00 sec)
```

13. Retrieve a list of job applicants along with the ID they have applied for,companies they have applied to and count of the positions

```
mysql> SELECT Applicants.ApplicantID, Applicants.FirstName, Applicants.LastName, Compan
ies.CompanyName, Jobs.JobTitle
    -> FROM Applicants
    -> LEFT JOIN Applications ON Applicants.ApplicantID = Applications.ApplicantID
    -> LEFT JOIN Jobs ON Applications.JobID = Jobs.JobID
    -> LEFT JOIN Companies ON Jobs.CompanyID = Companies.CompanyID;
+-------------+-----------+----------+------------------+----------------------+
| ApplicantID | FirstName | LastName | CompanyName      | JobTitle             |
+-------------+-----------+----------+------------------+----------------------+
|           1 | Aishwarya | Nair     | Innovate Systems | Data Scientist       |
|           2 | Karthik   | Raj      | Tech Solutions   | Software Engineer    |
|           3 | Meera     | Menon    | Digital Creations | UX Designer         |
|           3 | Meera     | Menon    | Tech Solutions   | Software Engineer    |
|           4 | Vijay     | Kumar    | Data Dynamics    | Web Developer        |
|           5 | Sneha     | Reddy    | Smart Innovations | AI Engineer         |
|           6 | Rahul     | Sinha    | CodeCrafters     | Mobile App Developer |
|           7 | Priya     | Sharma   | FutureTech       | Network Administrator |
|           8 | Amit      | Verma    | Infinite Ideas   | Database Analyst     |
|           9 | Ananya    | Menon    | Vibrant Visions  | Graphic Designer     |
|          10 | Arjun     | Gupta    | NULL             | NULL                 |
+-------------+-----------+----------+------------------+----------------------+
11 rows in set (0.00 sec)
```

14. Retrieve a list of companies along with the count of jobs they have posted, even if they have not received any applications.

```
mysql> SELECT Companies.CompanyID, Companies.CompanyName, COUNT(Jobs.JobID) AS JobCount

    -> FROM Companies
    -> LEFT JOIN Jobs ON Companies.CompanyID = Jobs.CompanyID
    -> LEFT JOIN Applications ON Jobs.JobID = Applications.JobID
    -> GROUP BY Companies.CompanyID, Companies.CompanyName;
+-----------+------------------+----------+
| CompanyID | CompanyName      | JobCount |
+-----------+------------------+----------+
|         1 | Tech Solutions   |        2 |
|         2 | Innovate Systems |        1 |
|         3 | Digital Creations |       1 |
|         4 | Data Dynamics    |        1 |
|         5 | Smart Innovations |       1 |
|         6 | CodeCrafters     |        1 |
|         7 | FutureTech       |        1 |
|         8 | Infinite Ideas   |        1 |
|         9 | Vibrant Visions  |        1 |
|        10 | TechGenius       |        1 |
+-----------+------------------+----------+
10 rows in set (0.00 sec)
```

15. List all applicants along with the companies and positions they have applied for, including those who have not applied.

```
mysql> SELECT Applicants.ApplicantID, Applicants.FirstName, Applicants.LastName, Compan
ies.CompanyName, Jobs.JobTitle
    -> FROM Applicants
    -> CROSS JOIN Jobs
    -> LEFT JOIN Applications ON Applicants.ApplicantID = Applications.ApplicantID AND
Jobs.JobID = Applications.JobID
    -> LEFT JOIN Companies ON Jobs.CompanyID = Companies.CompanyID;
+-------------+-----------+----------+------------------+----------------------+
| ApplicantID | FirstName | LastName | CompanyName      | JobTitle             |
+-------------+-----------+----------+------------------+----------------------+
|          10 | Arjun     | Gupta    | Tech Solutions   | Software Engineer    |
|           9 | Ananya    | Menon    | Tech Solutions   | Software Engineer    |
|           8 | Amit      | Verma    | Tech Solutions   | Software Engineer    |
|           7 | Priya     | Sharma   | Tech Solutions   | Software Engineer    |
|           6 | Rahul     | Sinha    | Tech Solutions   | Software Engineer    |
|           5 | Sneha     | Reddy    | Tech Solutions   | Software Engineer    |
|           4 | Vijay     | Kumar    | Tech Solutions   | Software Engineer    |
|           3 | Meera     | Menon    | Tech Solutions   | Software Engineer    |
|           2 | Karthik   | Raj      | Tech Solutions   | Software Engineer    |
|           1 | Aishwarya | Nair     | Tech Solutions   | Software Engineer    |
|          10 | Arjun     | Gupta    | Innovate Systems | Data Scientist       |
|           9 | Ananya    | Menon    | Innovate Systems | Data Scientist       |
|           8 | Amit      | Verma    | Innovate Systems | Data Scientist       |
|           7 | Priya     | Sharma   | Innovate Systems | Data Scientist       |
|           6 | Rahul     | Sinha    | Innovate Systems | Data Scientist       |
|           5 | Sneha     | Reddy    | Innovate Systems | Data Scientist       |
|           4 | Vijay     | Kumar    | Innovate Systems | Data Scientist       |
|           3 | Meera     | Menon    | Innovate Systems | Data Scientist       |
|           2 | Karthik   | Raj      | Innovate Systems | Data Scientist       |
|           1 | Aishwarya | Nair     | Innovate Systems | Data Scientist       |
|          10 | Arjun     | Gupta    | Digital Creations | UX Designer         |
|           9 | Ananya    | Menon    | Digital Creations | UX Designer         |
|           8 | Amit      | Verma    | Digital Creations | UX Designer         |
|           7 | Priya     | Sharma   | Digital Creations | UX Designer         |
|           6 | Rahul     | Sinha    | Digital Creations | UX Designer         |
|           5 | Sneha     | Reddy    | Digital Creations | UX Designer         |
|           4 | Vijay     | Kumar    | Digital Creations | UX Designer         |
|           3 | Meera     | Menon    | Digital Creations | UX Designer         |
|           2 | Karthik   | Raj      | Digital Creations | UX Designer         |
|           1 | Aishwarya | Nair     | Digital Creations | UX Designer         |
|          10 | Arjun     | Gupta    | Data Dynamics    | Web Developer        |
```

16. Find companies that have posted jobs with a salary higher than the average salary of all jobs.

```
mysql> SELECT DISTINCT Companies.CompanyID, Companies.CompanyName
    -> FROM Companies
    -> JOIN Jobs ON Companies.CompanyID = Jobs.CompanyID
    -> WHERE Jobs.Salary > (SELECT AVG(Salary) FROM Jobs WHERE Salary > 0);
+-----------+------------------+
| CompanyID | CompanyName      |
+-----------+------------------+
|         2 | Innovate Systems |
|         5 | Smart Innovations |
|         8 | Infinite Ideas   |
|        10 | TechGenius       |
+-----------+------------------+
4 rows in set (0.00 sec)
```

17. Display a list of applicants with their names and a concatenated string of their city and state.

```
mysql> SELECT ApplicantID, FirstName, LastName AS Location
    -> FROM Applicants;
+-------------+-----------+----------+
| ApplicantID | FirstName | Location |
+-------------+-----------+----------+
|           1 | Aishwarya | Nair     |
|           2 | Karthik   | Raj      |
|           3 | Meera     | Menon    |
|           4 | Vijay     | Kumar    |
|           5 | Sneha     | Reddy    |
|           6 | Rahul     | Sinha    |
|           7 | Priya     | Sharma   |
|           8 | Amit      | Verma    |
|           9 | Ananya    | Menon    |
|          10 | Arjun     | Gupta    |
+-------------+-----------+----------+
10 rows in set (0.00 sec)
```

18. Retrieve a list of jobs with titles containing either 'Developer' or 'Engineer".

```
mysql> SELECT JobID, JobTitle
    -> FROM Jobs
    -> WHERE JobTitle LIKE '%Developer%' OR JobTitle LIKE '%Engineer%';
+-------+----------------------+
| JobID | JobTitle             |
+-------+----------------------+
|     1 | Software Engineer    |
|     4 | Web Developer        |
|     5 | AI Engineer          |
|     6 | Mobile App Developer |
+-------+----------------------+
4 rows in set (0.00 sec)
```

19. Retrieve a list of applicants and the jobs they have applied for, including those who have not applied and jobs without applicants

```
mysql> SELECT Applicants.ApplicantID, Applicants.FirstName, Applicants.LastName, Jobs.J
obID, Jobs.JobTitle
    -> FROM Applicants
    -> CROSS JOIN Jobs
    -> LEFT JOIN Applications ON Applicants.ApplicantID = Applications.ApplicantID AND
Jobs.JobID = Applications.JobID;
+-------------+-----------+----------+-------+----------------------+
| ApplicantID | FirstName | LastName | JobID | JobTitle             |
+-------------+-----------+----------+-------+----------------------+
|          10 | Arjun     | Gupta    |     1 | Software Engineer    |
|           9 | Ananya    | Menon    |     1 | Software Engineer    |
|           8 | Amit      | Verma    |     1 | Software Engineer    |
|           7 | Priya     | Sharma   |     1 | Software Engineer    |
|           6 | Rahul     | Sinha    |     1 | Software Engineer    |
|           5 | Sneha     | Reddy    |     1 | Software Engineer    |
|           4 | Vijay     | Kumar    |     1 | Software Engineer    |
|           3 | Meera     | Menon    |     1 | Software Engineer    |
|           2 | Karthik   | Raj      |     1 | Software Engineer    |
|           1 | Aishwarya | Nair     |     1 | Software Engineer    |
|          10 | Arjun     | Gupta    |     2 | Data Scientist       |
|           9 | Ananya    | Menon    |     2 | Data Scientist       |
|           8 | Amit      | Verma    |     2 | Data Scientist       |
|           7 | Priya     | Sharma   |     2 | Data Scientist       |
|           6 | Rahul     | Sinha    |     2 | Data Scientist       |
|           5 | Sneha     | Reddy    |     2 | Data Scientist       |
|           4 | Vijay     | Kumar    |     2 | Data Scientist       |
|           3 | Meera     | Menon    |     2 | Data Scientist       |
|           2 | Karthik   | Raj      |     2 | Data Scientist       |
|           1 | Aishwarya | Nair     |     2 | Data Scientist       |
|          10 | Arjun     | Gupta    |     3 | UX Designer          |
|           9 | Ananya    | Menon    |     3 | UX Designer          |
|           8 | Amit      | Verma    |     3 | UX Designer          |
|           7 | Priya     | Sharma   |     3 | UX Designer          |
|           6 | Rahul     | Sinha    |     3 | UX Designer          |
|           5 | Sneha     | Reddy    |     3 | UX Designer          |
|           4 | Vijay     | Kumar    |     3 | UX Designer          |
|           3 | Meera     | Menon    |     3 | UX Designer          |
|           2 | Karthik   | Raj      |     3 | UX Designer          |
|           1 | Aishwarya | Nair     |     3 | UX Designer          |
|          10 | Arjun     | Gupta    |     4 | Web Developer        |
|           9 | Ananya    | Menon    |     4 | Web Developer        |
|           8 | Amit      | Verma    |     4 | Web Developer        |
```

20. List all combinations of applicants and companies where the company is in a specific city (e.g., city-Chennai).

```
mysql> SELECT Applicants.ApplicantID, Applicants.FirstName, Applicants.LastName, Compan
ies.CompanyName
    -> FROM Applicants
    -> CROSS JOIN Companies
    -> WHERE Companies.Location = 'Chennai';
+-------------+-----------+----------+----------------+
| ApplicantID | FirstName | LastName | CompanyName    |
+-------------+-----------+----------+----------------+
|           1 | Aishwarya | Nair     | TechGenius     |
|           1 | Aishwarya | Nair     | FutureTech     |
|           1 | Aishwarya | Nair     | Data Dynamics  |
|           1 | Aishwarya | Nair     | Tech Solutions |
|           2 | Karthik   | Raj      | TechGenius     |
|           2 | Karthik   | Raj      | FutureTech     |
|           2 | Karthik   | Raj      | Data Dynamics  |
|           2 | Karthik   | Raj      | Tech Solutions |
|           3 | Meera     | Menon    | TechGenius     |
|           3 | Meera     | Menon    | FutureTech     |
|           3 | Meera     | Menon    | Data Dynamics  |
|           3 | Meera     | Menon    | Tech Solutions |
|           4 | Vijay     | Kumar    | TechGenius     |
|           4 | Vijay     | Kumar    | FutureTech     |
|           4 | Vijay     | Kumar    | Data Dynamics  |
|           4 | Vijay     | Kumar    | Tech Solutions |
|           5 | Sneha     | Reddy    | TechGenius     |
```