DWDM Assignment

```
mysql> CREATE DATABASE UNIVERSITY;
Query OK, 1 row affected (0.01 sec)

mysql> USE University;
Database changed
mysql> CREATE TABLE Students (
    ->      StudentID INT PRIMARY KEY,
    ->      Name VARCHAR(50),
    ->      Age INT,
    ->      Major VARCHAR(50)
    -> );
Query OK, 0 rows affected (0.04 sec)

mysql> CREATE TABLE Courses (
    ->      CourseID INT PRIMARY KEY,
    ->      CourseName VARCHAR(50),
    ->      Credits INT
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> CREATE TABLE Enrollments (
    ->      EnrollmentID INT PRIMARY KEY,
    ->      StudentID INT,
    ->      CourseID INT,
    ->      Grade CHAR(2),
    ->      FOREIGN KEY (StudentID) REFERENCES Students(StudentID),
    ->      FOREIGN KEY (CourseID) REFERENCES Courses(CourseID)
    -> );
```

```
Query OK, 0 rows affected (0.04 sec)
mysql> INSERT INTO Students (StudentID, Name, Age, Major) VALUES
    -> (1, 'Alice', 20, 'Computer Science'),
    -> (2, 'Bob', 22, 'Data Science'),
    -> (3, 'Charlie', 21, 'Computer Science'),
    -> (4, 'Diana', 23, 'Data Science'),
    -> (5, 'Ethan', 19, 'Mathematics'),
    -> (6, 'Fiona', 20, 'Computer Science'),
    -> (7, 'George', 24, 'Data Science'),
    -> (8, 'Hannah', 22, 'Computer Science'),
    -> (9, 'Ian', 21, 'Data Science'),
    -> (10, 'Julia', 23, 'Computer Science'),
    -> (11, 'Kevin', 25, 'Data Science'),
    -> (12, 'Liam', 22, 'Computer Science'),
    -> (13, 'Mona', 24, 'Data Science'),
    -> (14, 'Nate', 17, 'Undeclared'),
    -> (15, 'Olivia', 23, 'Physics');
Query OK, 15 rows affected (0.01 sec)
Records: 15  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM Students;
+-----------+---------+------+------------------+
| StudentID | Name    | Age  | Major            |
+-----------+---------+------+------------------+
|         1 | Alice   |   20 | Computer Science |
|         2 | Bob     |   22 | Data Science     |
|         3 | Charlie |   21 | Computer Science |
|         4 | Diana   |   23 | Data Science     |
|         5 | Ethan   |   19 | Mathematics      |
|         6 | Fiona   |   20 | Computer Science |
|         7 | George  |   24 | Data Science     |
|         8 | Hannah  |   22 | Computer Science |
|         9 | Ian     |   21 | Data Science     |
|        10 | Julia   |   23 | Computer Science |
|        11 | Kevin   |   25 | Data Science     |
|        12 | Liam    |   22 | Computer Science |
|        13 | Mona    |   24 | Data Science     |
|        14 | Nate    |   17 | Undeclared       |
|        15 | Olivia  |   23 | Physics          |
+-----------+---------+------+------------------+
```

```
mysql> INSERT INTO Courses (CourseID, CourseName, Credits) VALUES
    -> (101, 'Database Systems', 4),
    -> (102, 'Algorithms', 4),
    -> (103, 'Machine Learning', 3),
    -> (104, 'Web Development', 3);
Query OK, 4 rows affected (0.00 sec)
Records: 4  Duplicates: 0  Warnings: 0

mysql>
mysql> SELECT * FROM Courses;
+----------+------------------+---------+
| CourseID | CourseName       | Credits |
+----------+------------------+---------+
|      101 | Database Systems |       4 |
|      102 | Algorithms       |       4 |
|      103 | Machine Learning |       3 |
|      104 | Web Development   |       3 |
+----------+------------------+---------+
4 rows in set (0.00 sec)

mysql> INSERT INTO Enrollments (EnrollmentID, StudentID, CourseID, Grade) VALUES
    -> (1, 1, 101, 'A'),
    -> (2, 2, 103, 'B'),
    -> (3, 3, 102, 'A'),
    -> (4, 4, 103, 'C'),
    -> (5, 1, 102, 'B'),
    -> (6, 6, 101, 'A-'),
    -> (7, 7, 103, 'B+'),
    -> (8, 8, 102, 'C+'),
    -> (9, 9, 103, 'A'),
    -> (10, 2, 101, 'B');
Query OK, 10 rows affected (0.01 sec)
Records: 10  Duplicates: 0  Warnings: 0
```

```
mysql> SELECT * FROM Courses;
+----------+------------------+---------+
| CourseID | CourseName       | Credits |
+----------+------------------+---------+
|      101 | Database Systems |       4 |
|      102 | Algorithms       |       4 |
|      103 | Machine Learning |       3 |
|      104 | Web Development   |       3 |
+----------+------------------+---------+
4 rows in set (0.00 sec)

mysql> INSERT INTO Enrollments (EnrollmentID, StudentID, CourseID, Grade) VALUES
    -> (1, 1, 101, 'A'),
    -> (2, 2, 103, 'B'),
    -> (3, 3, 102, 'A'),
    -> (4, 4, 103, 'C'),
    -> (5, 1, 102, 'B'),
    -> (6, 6, 101, 'A-'),
    -> (7, 7, 103, 'B+'),
    -> (8, 8, 102, 'C+'),
    -> (9, 9, 103, 'A'),
    -> (10, 2, 101, 'B');
Query OK, 10 rows affected (0.01 sec)
Records: 10  Duplicates: 0  Warnings: 0

mysql>
mysql> SELECT * FROM Enrollments;
+--------------+-----------+----------+-------+
| EnrollmentID | StudentID | CourseID | Grade |
+--------------+-----------+----------+-------+
|            1 |         1 |      101 | A     |
|            2 |         2 |      103 | B     |
|            3 |         3 |      102 | A     |
|            4 |         4 |      103 | C     |
|            5 |         1 |      102 | B     |
|            6 |         6 |      101 | A-    |
|            7 |         7 |      103 | B+    |
|            8 |         8 |      102 | C+    |
|            9 |         9 |      103 | A     |
|           10 |         2 |      101 | B     |
+--------------+-----------+----------+-------+
```

```
mysql> CREATE TABLE Departments (
    ->      DeptID INT PRIMARY KEY,
    ->      DeptName VARCHAR(50)
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> ALTER TABLE Students ADD Email VARCHAR(100);
Query OK, 0 rows affected (0.15 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM Students;
+-----------+---------+------+------------------+-------+
| StudentID | Name    | Age  | Major            | Email |
+-----------+---------+------+------------------+-------+
|         1 | Alice   |   20 | Computer Science | NULL  |
|         2 | Bob     |   22 | Data Science     | NULL  |
|         3 | Charlie |   21 | Computer Science | NULL  |
|         4 | Diana   |   23 | Data Science     | NULL  |
|         5 | Ethan   |   19 | Mathematics      | NULL  |
|         6 | Fiona   |   20 | Computer Science | NULL  |
|         7 | George  |   24 | Data Science     | NULL  |
|         8 | Hannah  |   22 | Computer Science | NULL  |
|         9 | Ian     |   21 | Data Science     | NULL  |
|        10 | Julia   |   23 | Computer Science | NULL  |
|        11 | Kevin   |   25 | Data Science     | NULL  |
|        12 | Liam    |   22 | Computer Science | NULL  |
|        13 | Mona    |   24 | Data Science     | NULL  |
|        14 | Nate    |   17 | Undeclared       | NULL  |
|        15 | Olivia  |   23 | Physics          | NULL  |
+-----------+---------+------+------------------+-------+
15 rows in set (0.00 sec)

mysql> DROP TABLE Departments;
Query OK, 0 rows affected (0.01 sec)

mysql> ALTER TABLE Students ADD CONSTRAINT AgeCheck CHECK (Age >= 17);
Query OK, 15 rows affected (0.07 sec)
Records: 15  Duplicates: 0  Warnings: 0
```

```
mysql> ALTER TABLE Students DROP CONSTRAINT AgeCheck;
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> UPDATE Students SET Major = 'Data Science' WHERE StudentID = 1;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql>
mysql> SELECT * FROM Students;
+-----------+---------+------+------------------+-------+
| StudentID | Name    | Age  | Major            | Email |
+-----------+---------+------+------------------+-------+
|         1 | Alice   |   20 | Data Science     | NULL  |
|         2 | Bob     |   22 | Data Science     | NULL  |
|         3 | Charlie |   21 | Computer Science | NULL  |
|         4 | Diana   |   23 | Data Science     | NULL  |
|         5 | Ethan   |   19 | Mathematics      | NULL  |
|         6 | Fiona   |   20 | Computer Science | NULL  |
|         7 | George  |   24 | Data Science     | NULL  |
|         8 | Hannah  |   22 | Computer Science | NULL  |
|         9 | Ian     |   21 | Data Science     | NULL  |
|        10 | Julia   |   23 | Computer Science | NULL  |
|        11 | Kevin   |   25 | Data Science     | NULL  |
|        12 | Liam    |   22 | Computer Science | NULL  |
|        13 | Mona    |   24 | Data Science     | NULL  |
|        14 | Nate    |   17 | Undeclared       | NULL  |
|        15 | Olivia  |   23 | Physics          | NULL  |
+-----------+---------+------+------------------+-------+
15 rows in set (0.00 sec)

mysql> DELETE FROM Students WHERE Age < 18;
Query OK, 1 row affected (0.01 sec)
```

```
mysql> SELECT * FROM Students;
+-----------+---------+------+------------------+-------+
| StudentID | Name    | Age  | Major            | Email |
+-----------+---------+------+------------------+-------+
|         1 | Alice   |   20 | Data Science     | NULL  |
|         2 | Bob     |   22 | Data Science     | NULL  |
|         3 | Charlie |   21 | Computer Science | NULL  |
|         4 | Diana   |   23 | Data Science     | NULL  |
|         5 | Ethan   |   19 | Mathematics      | NULL  |
|         6 | Fiona   |   20 | Computer Science | NULL  |
|         7 | George  |   24 | Data Science     | NULL  |
|         8 | Hannah  |   22 | Computer Science | NULL  |
|         9 | Ian     |   21 | Data Science     | NULL  |
|        10 | Julia   |   23 | Computer Science | NULL  |
|        11 | Kevin   |   25 | Data Science     | NULL  |
|        12 | Liam    |   22 | Computer Science | NULL  |
|        13 | Mona    |   24 | Data Science     | NULL  |
|        15 | Olivia  |   23 | Physics          | NULL  |
+-----------+---------+------+------------------+-------+
14 rows in set (0.00 sec)

mysql> SELECT Name, Major FROM Students WHERE Age > 19;
+---------+------------------+
| Name    | Major            |
+---------+------------------+
| Alice   | Data Science     |
| Bob     | Data Science     |
| Charlie | Computer Science |
| Diana   | Data Science     |
| Fiona   | Computer Science |
| George  | Data Science     |
| Hannah  | Computer Science |
| Ian     | Data Science     |
| Julia   | Computer Science |
| Kevin   | Data Science     |
| Liam    | Computer Science |
| Mona    | Data Science     |
| Olivia  | Physics          |
+---------+------------------+
13 rows in set (0.00 sec)
```

```
mysql> DROP TABLE Departments;
Query OK, 0 rows affected (0.01 sec)

mysql> ALTER TABLE Students ADD CONSTRAINT AgeCheck CHECK (Age >= 17);
Query OK, 15 rows affected (0.07 sec)
Records: 15  Duplicates: 0  Warnings: 0

mysql> ALTER TABLE Students DROP CONSTRAINT AgeCheck;
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> UPDATE Students SET Major = 'Data Science' WHERE StudentID = 1;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql>
mysql> SELECT * FROM Students;
+-----------+---------+------+------------------+-------+
| StudentID | Name    | Age  | Major            | Email |
+-----------+---------+------+------------------+-------+
|         1 | Alice   |   20 | Data Science     | NULL  |
|         2 | Bob     |   22 | Data Science     | NULL  |
|         3 | Charlie |   21 | Computer Science | NULL  |
|         4 | Diana   |   23 | Data Science     | NULL  |
|         5 | Ethan   |   19 | Mathematics      | NULL  |
|         6 | Fiona   |   20 | Computer Science | NULL  |
|         7 | George  |   24 | Data Science     | NULL  |
|         8 | Hannah  |   22 | Computer Science | NULL  |
|         9 | Ian     |   21 | Data Science     | NULL  |
|        10 | Julia   |   23 | Computer Science | NULL  |
|        11 | Kevin   |   25 | Data Science     | NULL  |
|        12 | Liam    |   22 | Computer Science | NULL  |
|        13 | Mona    |   24 | Data Science     | NULL  |
|        14 | Nate    |   17 | Undeclared       | NULL  |
|        15 | Olivia  |   23 | Physics          | NULL  |
+-----------+---------+------+------------------+-------+
15 rows in set (0.00 sec)
```

```
mysql> DELETE FROM Students WHERE Age < 18;
Query OK, 1 row affected (0.01 sec)

mysql>
mysql> SELECT * FROM Students;
+-----------+---------+------+------------------+-------+
| StudentID | Name    | Age  | Major            | Email |
+-----------+---------+------+------------------+-------+
|         1 | Alice   |   20 | Data Science     | NULL  |
|         2 | Bob     |   22 | Data Science     | NULL  |
|         3 | Charlie |   21 | Computer Science | NULL  |
|         4 | Diana   |   23 | Data Science     | NULL  |
|         5 | Ethan   |   19 | Mathematics      | NULL  |
|         6 | Fiona   |   20 | Computer Science | NULL  |
|         7 | George  |   24 | Data Science     | NULL  |
|         8 | Hannah  |   22 | Computer Science | NULL  |
|         9 | Ian     |   21 | Data Science     | NULL  |
|        10 | Julia   |   23 | Computer Science | NULL  |
|        11 | Kevin   |   25 | Data Science     | NULL  |
|        12 | Liam    |   22 | Computer Science | NULL  |
|        13 | Mona    |   24 | Data Science     | NULL  |
|        15 | Olivia  |   23 | Physics          | NULL  |
+-----------+---------+------+------------------+-------+
14 rows in set (0.00 sec)

mysql> SELECT Name, Major FROM Students WHERE Age > 19;
+---------+------------------+
| Name    | Major            |
+---------+------------------+
| Alice   | Data Science     |
| Bob     | Data Science     |
| Charlie | Computer Science |
| Diana   | Data Science     |
| Fiona   | Computer Science |
| George  | Data Science     |
| Hannah  | Computer Science |
| Ian     | Data Science     |
| Julia   | Computer Science |
| Kevin   | Data Science     |
| Liam    | Computer Science |
| Mona    | Data Science     |
```

```
mysql> SELECT AVG(Age) AS AvgAge FROM Students;
+---------+
| AvgAge  |
+---------+
| 22.0714 |
+---------+
1 row in set (0.00 sec)

mysql> SELECT Major, COUNT(*) AS StudentCount
    -> FROM Students
    -> GROUP BY Major
    -> HAVING COUNT(*) > 5;
+--------------+--------------+
| Major        | StudentCount |
+--------------+--------------+
| Data Science |            7 |
+--------------+--------------+
1 row in set (0.00 sec)

mysql> SELECT * FROM Students WHERE Age > 20 AND Major = 'Computer Science';
+-----------+---------+------+------------------+-------+
| StudentID | Name    | Age  | Major            | Email |
+-----------+---------+------+------------------+-------+
|         3 | Charlie |   21 | Computer Science | NULL  |
|         8 | Hannah  |   22 | Computer Science | NULL  |
|        10 | Julia   |   23 | Computer Science | NULL  |
|        12 | Liam    |   22 | Computer Science | NULL  |
+-----------+---------+------+------------------+-------+
4 rows in set (0.00 sec)
```

```
mysql> SELECT s.Name, e.Grade,
    -> RANK() OVER (ORDER BY Grade ASC) AS RankInClass
    -> FROM Enrollments e JOIN Students s ON e.StudentID = s.StudentID;
+---------+-------+-------------+
| Name    | Grade | RankInClass |
+---------+-------+-------------+
| Alice   | A     |           1 |
| Charlie | A     |           1 |
| Ian     | A     |           1 |
| Fiona   | A-    |           4 |
| Alice   | B     |           5 |
| Bob     | B     |           5 |
| Bob     | B     |           5 |
| George  | B+    |           8 |
| Diana   | C     |           9 |
| Hannah  | C+    |          10 |
+---------+-------+-------------+
10 rows in set (0.01 sec)

mysql> SELECT s.Name, c.CourseName
    -> FROM Students s
    -> INNER JOIN Enrollments e ON s.StudentID = e.StudentID
    -> INNER JOIN Courses c ON e.CourseID = c.CourseID;
+---------+------------------+
| Name    | CourseName       |
+---------+------------------+
| Alice   | Database Systems |
| Bob     | Machine Learning |
| Charlie | Algorithms       |
| Diana   | Machine Learning |
| Alice   | Algorithms       |
| Fiona   | Database Systems |
| George  | Machine Learning |
| Hannah  | Algorithms       |
| Ian     | Machine Learning |
| Bob     | Database Systems |
+---------+------------------+
10 rows in set (0.00 sec)
```

```
mysql> SELECT s.Name, c.CourseName
    -> FROM Students s
    -> LEFT JOIN Enrollments e ON s.StudentID = e.StudentID
    -> LEFT JOIN Courses c ON e.CourseID = c.CourseID;
+---------+------------------+
| Name    | CourseName       |
+---------+------------------+
| Alice   | Database Systems |
| Alice   | Algorithms       |
| Bob     | Machine Learning |
| Bob     | Database Systems |
| Charlie | Algorithms       |
| Diana   | Machine Learning |
| Ethan   | NULL             |
| Fiona   | Database Systems |
| George  | Machine Learning |
| Hannah  | Algorithms       |
| Ian     | Machine Learning |
| Julia   | NULL             |
| Kevin   | NULL             |
| Liam    | NULL             |
| Mona    | NULL             |
| Olivia  | NULL             |
+---------+------------------+
16 rows in set (0.00 sec)
```

```
mysql> SELECT s.Name, c.CourseName
    -> FROM Students s
    -> LEFT JOIN Enrollments e ON s.StudentID = e.StudentID
    -> LEFT JOIN Courses c ON e.CourseID = c.CourseID;
+---------+------------------+
| Name    | CourseName       |
+---------+------------------+
| Alice   | Database Systems |
| Alice   | Algorithms       |
| Bob     | Machine Learning |
| Bob     | Database Systems |
| Charlie | Algorithms       |
| Diana   | Machine Learning |
| Ethan   | NULL             |
| Fiona   | Database Systems |
| George  | Machine Learning |
| Hannah  | Algorithms       |
| Ian     | Machine Learning |
| Julia   | NULL             |
| Kevin   | NULL             |
| Liam    | NULL             |
| Mona    | NULL             |
| Olivia  | NULL             |
+---------+------------------+
16 rows in set (0.00 sec)
```

```
mysql> SELECT s.Name, c.CourseName
    -> FROM Students s CROSS JOIN Courses c;
+---------+------------------+
| Name    | CourseName       |
+---------+------------------+
| Alice   | Web Development  |
| Alice   | Machine Learning |
| Alice   | Algorithms       |
| Alice   | Database Systems |
| Bob     | Web Development  |
| Bob     | Machine Learning |
| Bob     | Algorithms       |
| Bob     | Database Systems |
| Charlie | Web Development  |
| Charlie | Machine Learning |
| Charlie | Algorithms       |
| Charlie | Database Systems |
| Diana   | Web Development  |
| Diana   | Machine Learning |
| Diana   | Algorithms       |
| Diana   | Database Systems |
| Ethan   | Web Development  |
| Ethan   | Machine Learning |
| Ethan   | Algorithms       |
| Ethan   | Database Systems |
| Fiona   | Web Development  |
| Fiona   | Machine Learning |
| Fiona   | Algorithms       |
| Fiona   | Database Systems |
| George  | Web Development  |
| George  | Machine Learning |
| George  | Algorithms       |
| George  | Database Systems |
| Hannah  | Web Development  |
| Hannah  | Machine Learning |
| Hannah  | Algorithms       |
| Hannah  | Database Systems |
| Ian     | Web Development  |
| Ian     | Machine Learning |
| Ian     | Algorithms       |
| Ian     | Database Systems |
```

```
mysql> SELECT s1.Name AS Student1, s2.Name AS Student2
    -> FROM Students s1
    -> JOIN Students s2 ON s1.Major = s2.Major AND s1.StudentID <> s2.StudentID
+----------+----------+
| Student1 | Student2 |
+----------+----------+
| Mona     | Alice    |
| Kevin    | Alice    |
| Ian      | Alice    |
| George   | Alice    |
| Diana    | Alice    |
| Bob      | Alice    |
| Mona     | Bob      |
| Kevin    | Bob      |
| Ian      | Bob      |
| George   | Bob      |
| Diana    | Bob      |
| Alice    | Bob      |
| Liam     | Charlie  |
| Julia    | Charlie  |
| Hannah   | Charlie  |
| Fiona    | Charlie  |
| Mona     | Diana    |
| Kevin    | Diana    |
| Ian      | Diana    |
| George   | Diana    |
| Bob      | Diana    |
| Alice    | Diana    |
| Liam     | Fiona    |
| Julia    | Fiona    |
| Hannah   | Fiona    |
| Charlie  | Fiona    |
| Mona     | George   |
| Kevin    | George   |
| Ian      | George   |
| Diana    | George   |
| Bob      | George   |
| Alice    | George   |
| Liam     | Hannah   |
```

```
mysql> SELECT Major, STRING_AGG(Name, ', ') AS Students
    -> FROM Students
    -> GROUP BY Major;
ERROR 1305 (42000): FUNCTION university.STRING_AGG does not exist
mysql> ^C
mysql> SELECT Major, STRING_AGG(Name, ', ') AS Students
    -> FROM Students
    -> GROUP BY Major;
ERROR 1305 (42000): FUNCTION university.STRING_AGG does not exist
mysql> SELECT Name FROM Students
    -> WHERE Age > (SELECT AVG(Age) FROM Students);
+--------+
| Name   |
+--------+
| Diana  |
| George |
| Julia  |
| Kevin  |
| Mona   |
| Olivia |
+--------+
6 rows in set (0.01 sec)

mysql> SELECT Name FROM Students s
    -> WHERE EXISTS (
    ->     SELECT 1 FROM Enrollments e
    ->     WHERE e.StudentID = s.StudentID AND e.Grade = 'A'
    -> );
+---------+
| Name    |
+---------+
| Alice   |
| Charlie |
| Ian     |
+---------+
3 rows in set (0.00 sec)
```

```
mysql> SELECT Major, AvgAge
    -> FROM (SELECT Major, AVG(Age) AS AvgAge FROM Students GROUP BY Major) AS t;
+------------------+---------+
| Major            | AvgAge  |
+------------------+---------+
| Data Science     | 22.7143 |
| Computer Science | 21.6000 |
| Mathematics      | 19.0000 |
| Physics          | 23.0000 |
+------------------+---------+
4 rows in set (0.00 sec)

mysql> DROP INDEX idx_student_major ON Students;
ERROR 1091 (42000): Can't DROP 'idx_student_major'; check that column/key exists
mysql> SELECT Name, Age
    -> FROM Students
    -> ORDER BY Age DESC;
+---------+------+
| Name    | Age  |
+---------+------+
| Kevin   |   25 |
| George  |   24 |
| Mona    |   24 |
| Diana   |   23 |
| Julia   |   23 |
| Olivia  |   23 |
| Bob     |   22 |
| Hannah  |   22 |
| Liam    |   22 |
| Charlie |   21 |
| Ian     |   21 |
| Alice   |   20 |
| Fiona   |   20 |
| Ethan   |   19 |
+---------+------+
14 rows in set (0.00 sec)
```

```
mysql> SELECT TOP 5 Name, Age
    -> FROM Students
    -> ORDER BY Age DESC;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '5
 Name, Age
FROM Students
ORDER BY Age DESC' at line 1
mysql> WITH AvgAgeCTE AS (
    ->     SELECT AVG(Age) AS AgeValue FROM Students
    -> )
    -> SELECT Name, Age
    -> FROM Students, AvgAgeCTE
    -> WHERE Students.Age > AvgAgeCTE.AgeValue;
+--------+------+
| Name   | Age  |
+--------+------+
| Diana  |   23 |
| George |   24 |
| Julia  |   23 |
| Kevin  |   25 |
| Mona   |   24 |
| Olivia |   23 |
+--------+------+
6 rows in set (0.00 sec)
```