

FINAL PROJECT REPORT – DATABASE SYSTEMS

University Admissions Test Score Analytics System

Course: Databases

Project Title: University Admissions Test Score Analytics System

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1. Project Description:

This project designs and implements a relational database system for analyzing U.S. universities based on admissions rates, SAT/ACT test scores, income distributions, and ranking information. The system supports analytical queries through normalized tables, stored procedures, and views, enabling flexible and efficient data analysis.

2. Changes Since Phase I

Since Phase I, the database design has been revised to improve normalization, reduce redundancy, and better support analytical queries.

a. Unification of Exam Score Tables

In Phase I, SAT and ACT scores were stored in separate tables with multiple score columns.

In Phase II, these structures were replaced by ExamScores, ExamTypes and ScoreTypes table. Exam scores are now represented using ExamType from ExamTypes table, ScoreType from ScoreTypes table, Percentile, and ScoreValue.

This change eliminated repeating attributes and ensured compliance with Third Normal Form (3NF).

b. Normalization of Income Distribution Data

Previously, income distribution data was stored as multiple percentage columns. In the final design, this data was normalized into the IncomeDistributions table, where each income bracket is stored as a separate row.

This structure simplifies aggregation and comparison across institutions.

c. Central Role of the Institutions Table

The Institutions table was restructured to serve as the central entity of the database.

This approach improves referential integrity and simplifies join operations.

d. Removal of Redundant Attributes

Several redundant or derived attributes present in Phase I were removed. Derived values such as averages are now calculated using queries, views, or aggregate functions rather than being stored directly.

e. Addition of Stored Procedures and Views

Phase I included only basic table structures.

In Phase II, stored procedures and views were added to support dynamic queries and summarized outputs, as required by the project guidelines.

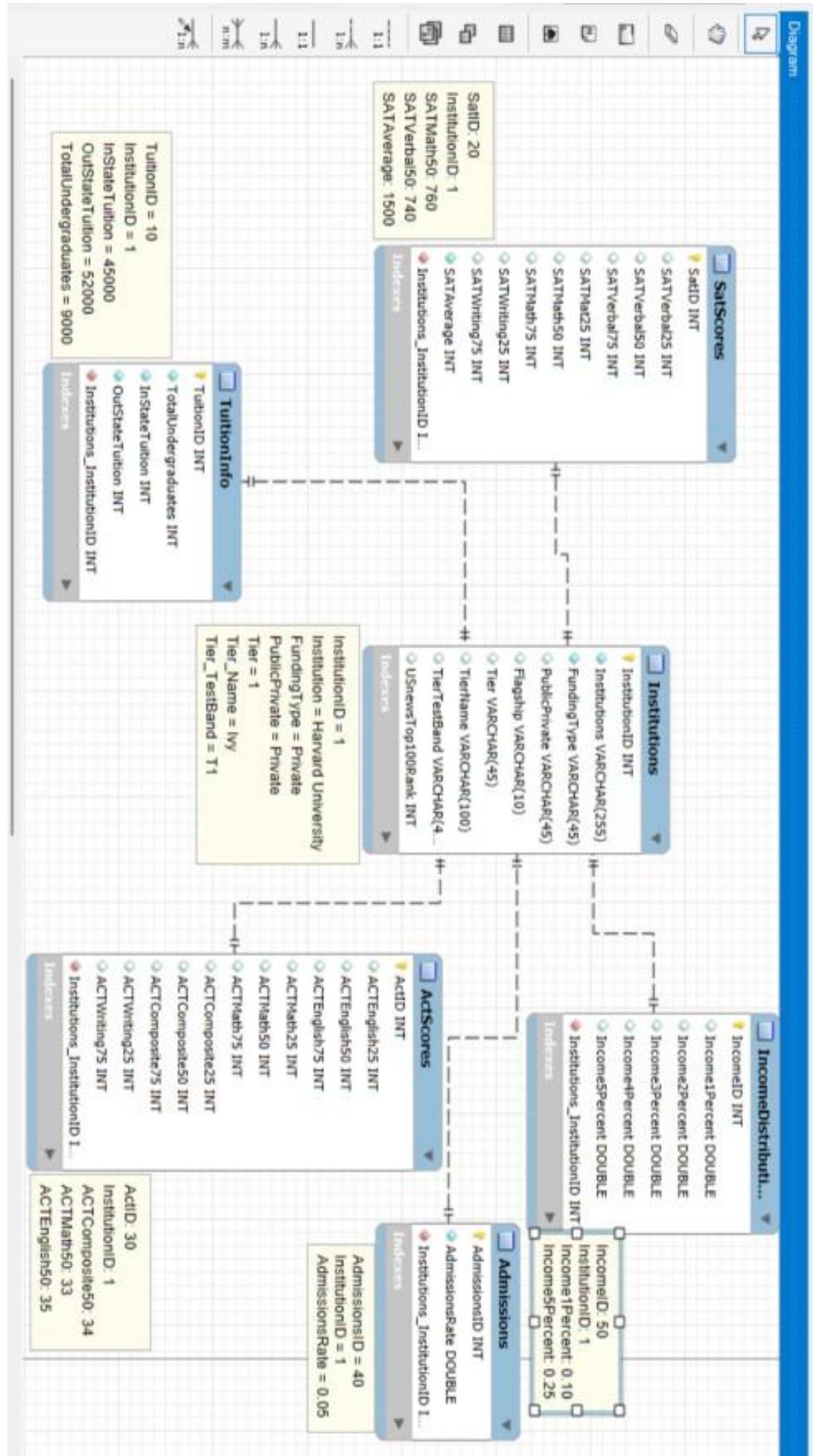
f. Improved Relationship Structure

The final ER diagram clearly defines one-to-many relationships between institutions and related entities such as exam scores and income distributions.

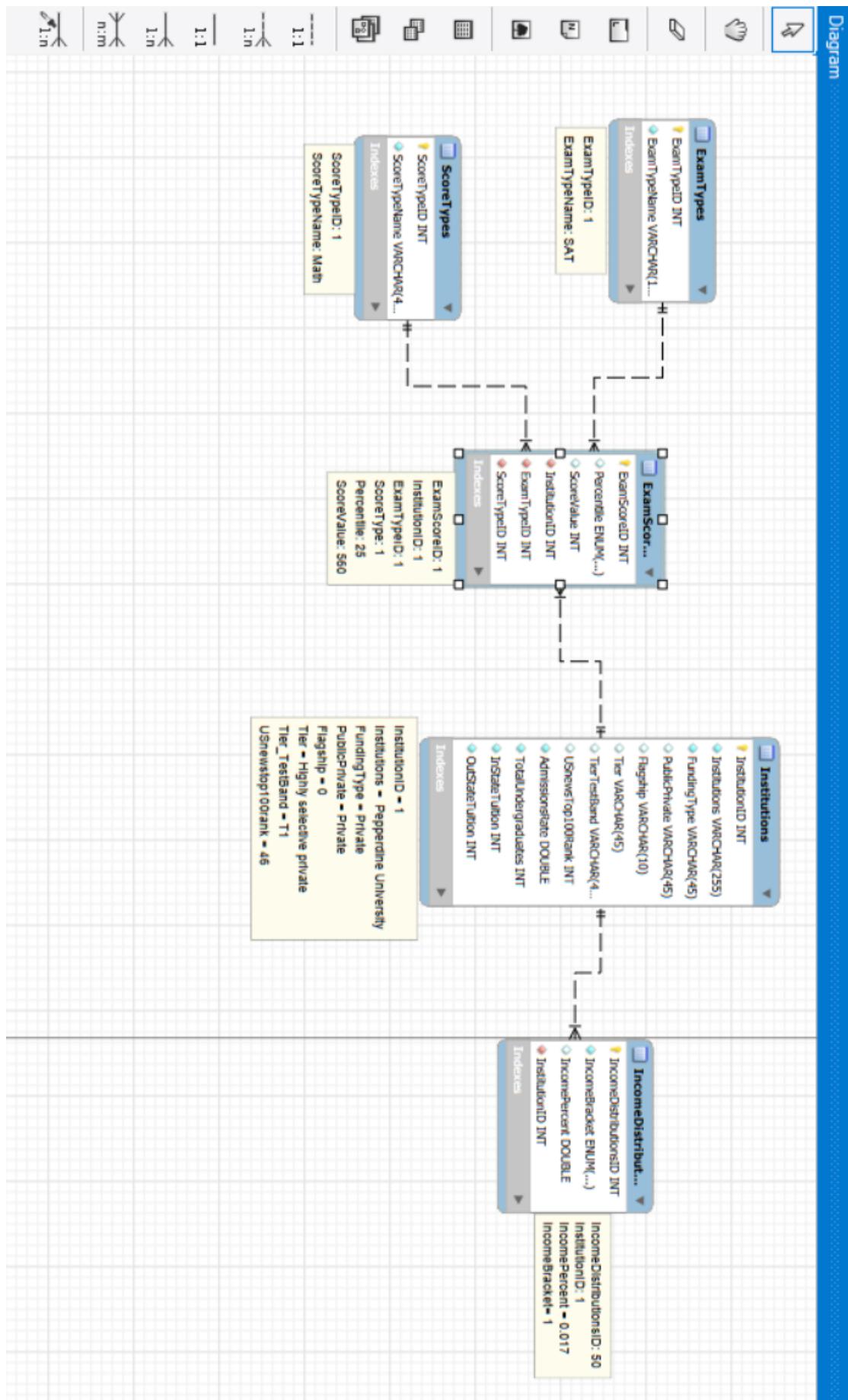
Overall, the database evolved from a partially normalized structure to a fully normalized relational design that supports efficient querying and future extension.

ER DIAGRAM:

First diagram:



Last Diagram :



3. Data Loading Process

The dataset used in this project was obtained from Kaggle:

<https://www.kaggle.com/datasets/alexsciences/university-test-scores>

The data was originally provided as a CSV file containing admissions rates, SAT/ACT test scores, income distribution percentages, and ranking information for U.S. universities.

The database was loaded in multiple steps. First, the raw CSV file was imported into MySQL using the **MySQL Workbench Table Data Import Wizard** to create a staging table (university_test_scores).

Before loading the final tables, preprocessing was performed using SQL to handle missing values, convert non-numeric fields (e.g., “NA”) into NULL, and cast text-based numeric attributes into appropriate data types.

Custom **INSERT ... SELECT** SQL scripts were developed to:

- Populate the Institutions table with unique institution records
- Normalize exam score data into the ExamScores table
- Transform income distribution percentages into the IncomeDistributions table

All rows from the original dataset were successfully uploaded into the database. No data was excluded.

4. If you did not use MySql Workbench on Windows, describe the exact software/hardware platform you used.

We used MySql Workbench on Windows.

5. User's Guide – Views and Stored Procedures

Stored Procedure: GetInstitutionExamScores

This stored procedure retrieves all exam score records belonging to a specified institution. The institution name is provided as an input parameter, and the procedure returns the exam type, score type, percentile, and score value. It performs JOIN operations across normalized tables and is primarily intended for analytical and reporting purposes.

Stored Procedure: GetTopInstitutionsByScore

This stored procedure retrieves the institutions with the highest exam scores for a selected exam type, score type, and percentile. The user can also specify how many institutions will be returned (Top-N query). This procedure supports comparative performance analysis across institutions and demonstrates the use of parameterized queries, sorting, and limiting in SQL.

Stored Procedure: InsertExamScore

This stored procedure inserts a new exam score record into the ExamScores table. Rather than requiring users to manually supply foreign-key identifiers, it accepts human-readable input such as institution name, exam type, and score type. These values are internally mapped to their corresponding IDs using lookup tables, improving data-entry usability while maintaining referential integrity within the normalized database schema.

View: vw_AllExamScores

This view combines data from the ExamScores, Institutions, ExamTypes, and ScoreTypes tables into a single logical dataset. It presents each exam score together with the institution name, exam type, score type, percentile, and score value. The view simplifies reporting by providing a denormalized perspective over the normalized relational structure.

View: vw_AvgExamScoresByInstitution

This view calculates the average exam score for each institution, grouped by exam type, score type, and percentile. It supports analytical reporting by allowing users to compare institutional SAT/ACT performance and demonstrates the use of aggregation over normalized relational data.

6. Outputs of Selected Stored Procedures and Views

Output of Stored Procedure: GetInstitutionExamScores

```
11      #1. GetInstitution :  
12  
13 •   SELECT Institutions  
14     FROM Institutions  
15     LIMIT 5;  
16  
17 •   CALL GetInstitutionExamScores('Alabama State University');
```

Result Grid					
	InstitutionName	ExamType	ScoreType	Percentile	ScoreValue
▶	Alabama State University	ACT	Composite	25	16
	Alabama State University	ACT	Composite	50	18
	Alabama State University	ACT	Composite	75	20
	Alabama State University	ACT	English	25	15
	Alabama State University	ACT	English	50	18
	Alabama State University	ACT	English	75	21
	Alabama State University	ACT	Math	25	15
	Alabama State University	ACT	Math	50	17
	Alabama State University	ACT	Math	75	19
	Alabama State University	SAT	Average	50	977
	Alabama State University	SAT	Math	25	421
	Alabama State University	SAT	Math	50	477
	Alabama State University	SAT	Math	75	531
	Alabama State University	SAT	Verbal	25	444
	Alabama State University	SAT	Verbal	50	489
	Alabama State University	SAT	Verbal	75	538

Output of Stored Procedure: GetTopInstitutionsByScore

The screenshot shows a SQL Server Management Studio (SSMS) interface. The top menu bar has tabs for 'sql1', 'sql2', 'sql3*', 'sql4*' (which is active), and 'SQL File 10*'. Below the tabs is a toolbar with various icons for file operations, search, and navigation. The main window displays the following SQL code:

```
22      # GetTopInstitutionsByScore
23
24 •  CALL GetTopInstitutionsByScore('SAT', 'Math', '75', 10);
25
26      #####3
```

Below the code, there is a 'Result Grid' tab selected. The results are presented in a table with the following columns: InstitutionName, ExamType, ScoreType, Percentile, and ScoreValue. The data shows multiple entries for Alabama State University across different exam types (ACT and SAT) and score types (Composite, English, Math, Average, Verbal). The 'ScoreValue' column contains some very large numbers (e.g., 977, 421, 477, 531, 444, 489, 538), which likely represent raw scores or scaled values.

	InstitutionName	ExamType	ScoreType	Percentile	ScoreValue
▶	Alabama State University	ACT	Composite	25	16
	Alabama State University	ACT	Composite	50	18
	Alabama State University	ACT	Composite	75	20
	Alabama State University	ACT	English	25	15
	Alabama State University	ACT	English	50	18
	Alabama State University	ACT	English	75	21
	Alabama State University	ACT	Math	25	15
	Alabama State University	ACT	Math	50	17
	Alabama State University	ACT	Math	75	19
	Alabama State University	SAT	Average	50	977
	Alabama State University	SAT	Math	25	421
	Alabama State University	SAT	Math	50	477
	Alabama State University	SAT	Math	75	531
	Alabama State University	SAT	Verbal	25	444
	Alabama State University	SAT	Verbal	50	489
	Alabama State University	SAT	Verbal	75	538

.Output of Stored Procedure: InsertExamScore

sql1 sql2 sql3* sql4* SQL File 10*

25
26 #####3
27 # InsertExamScore
28
29 • SELECT Institutions
30 FROM Institutions
31 LIMIT 1;
32
33 • CALL InsertExamScore(
34 'Alabama A & M University',
35 'SAT',
36 'Math',
37 '75',
38 780
39);
40
41 • SELECT *
42 FROM ExamScores es
43 JOIN Institutions i ON es.InstitutionID = i.InstitutionID
44 JOIN ExamTypes et ON es.ExamTypeID = et.ExamTypeID
45 JOIN ScoreTypes st ON es.ScoreTypeID = st.ScoreTypeID
46 ORDER BY es.ExamScoreID DESC
47 LIMIT 1;

sql1 sql2 sql3* sql4* SQL File 10*

33 • CALL InsertExamScore(
34 'Alabama A & M University',
35 'SAT',
36 'Math',
37 '75',
38 780
39);
40
41 • SELECT *
42 FROM ExamScores es
43 JOIN Institutions i ON es.InstitutionID = i.InstitutionID
44 JOIN ExamTypes et ON es.ExamTypeID = et.ExamTypeID
45 JOIN ScoreTypes st ON es.ScoreTypeID = st.ScoreTypeID
46 ORDER BY es.ExamScoreID DESC
47 LIMIT 1;
48

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

ExamScoreID	Percentile	ScoreValue	InstitutionID	ExamTypeID	ScoreTypeID	InstitutionID	Institutions	FundingType	PublicPrivate	Flagship	Tier	TierTestBand
16389	75	780	1	1	1	1	Alabama A & M University	public	NA	NA	NA	NA

Output of View Procedure: vw_AllExamScores

The screenshot shows a SQL editor window with the tab bar set to 'SQL File 10*'. The code area contains the creation of a view named 'vw_AllExamScores' and a select statement to retrieve data from it. The result grid below displays the output of the query.

```
4 • CREATE VIEW vw_AllExamScores AS
5     SELECT
6         es.ExamScoreID,
7         i.Institutions      AS InstitutionName,
8         et.ExamTypeName    AS ExamType,
9         st.ScoreTypeName   AS ScoreType,
10        es.Percentile,
11        es.ScoreValue
12    FROM ExamScores es
13    JOIN Institutions i ON es.InstitutionID = i.InstitutionID
14    JOIN ExamTypes et ON es.ExamTypeID = et.ExamTypeID
15    JOIN ScoreTypes st ON es.ScoreTypeID = st.ScoreTypeID;
16
17 • SELECT * FROM vw_AllExamScores
18 LIMIT 10;
19
```

	ExamScoreID	InstitutionName	ExamType	ScoreType	Percentile	ScoreValue
▶	5879	Alabama A & M University	SAT	Average	50	947
	5880	University of Alabama at Birmingham	SAT	Average	50	1251
	5881	University of Alabama in Huntsville	SAT	Average	50	1321
	5882	Alabama State University	SAT	Average	50	977
	5883	The University of Alabama	SAT	Average	50	1287

Output of View Procedure: vw_AvgExamScoresByInstitution

The screenshot shows a SQL editor window with the tab bar set to 'SQL File 10*'. The code area contains the creation of a view named 'vw_AvgExamScoresByInstitution' which provides average exam scores per institution, exam type, score type, and percentile.

```
24 -- View that provides average exam scores per institution, exam type, score type and percentile.
25 • CREATE VIEW vw_AvgExamScoresByInstitution AS
26     SELECT
27         i.InstitutionID,
28         i.Institutions      AS InstitutionName,
29         et.ExamTypeName    AS ExamType,
30         st.ScoreTypeName   AS ScoreType,
31         es.Percentile,
32         AVG(es.ScoreValue) AS AvgScore
33     FROM ExamScores es
34     JOIN Institutions i ON es.InstitutionID = i.InstitutionID
35     JOIN ExamTypes et ON es.ExamTypeID = et.ExamTypeID
36     JOIN ScoreTypes st ON es.ScoreTypeID = st.ScoreTypeID
37     GROUP BY
38         i.InstitutionID,
39         i.Institutions,
40         et.ExamTypeName,
```

```
41             st.ScoreTypeName,
42             es.Percentile;
43
44 • SELECT *
45   FROM vw_AvgExamScoresByInstitution
46   ORDER BY AvgScore DESC
47   LIMIT 10;
48
```

Result Grid					
		Export:		Wrap Cell Content:	
InstitutionID	InstitutionName	ExamType	ScoreType	Percentile	AvgScore
145	University of Chicago	SAT	Average	50	1554.0000
291	Harvard University	SAT	Average	50	1553.0000
791	Stanford University	SAT	Average	50	1553.0000
298	Massachusetts Institute of Technology	SAT	Average	50	1553.0000
695	Rice University	SAT	Average	50	1553.0000
270	Johns Hopkins University	SAT	Averaoe	50	1553.0000

7. System Limitations and Suggested Improvements

Limitations

1. Single-source dataset: The database is built from one public Kaggle dataset, so the system is limited to the coverage, accuracy, and update frequency of that source.
2. Missing/NULL values: Some institutions do not provide complete SAT/ACT percentiles or income bracket percentages. These are

stored as NULL, which can reduce the completeness of certain analyses.

3. No historical tracking: The dataset represents a snapshot in time. The schema does not track changes across years (e.g., ranking or tuition trends over time).
4. Limited domain scope: The system focuses on U.S. institutions and a predefined set of attributes (admissions, test scores, income distribution, tuition). Other relevant factors (e.g., graduation rates, employment outcomes) are not included.

Suggested Improvements

1. **Add time dimension (Year/Semester):** Introduce a time-based structure to store historical changes in rankings, tuition, admissions rates, and scores to enable trend analysis.
2. **Data validation and cleansing layer:** Implement preprocessing scripts (Python/ETL) to standardize naming, handle outliers, and improve data consistency before loading.
3. **Expand the dataset:** Integrate additional sources (e.g., official government/education datasets) to increase coverage and reliability.
4. **Advanced indexing and query optimization:** Add composite indexes based on common query patterns (e.g., (ExamType, ScoreType, Percentile, InstitutionID)) and analyze query plans for improvement.

8. FULL RELATIONAL TABLE SPECIFICATION (SQL DDL)

```
1 •      SET FOREIGN_KEY_CHECKS = 0;
2
3 •      DROP TABLE IF EXISTS ExamScores;
4 •      DROP TABLE IF EXISTS IncomeDistributions;
5 •      DROP TABLE IF EXISTS ExamTypes;
6 •      DROP TABLE IF EXISTS ScoreTypes;
7 •      DROP TABLE IF EXISTS Institutions;
8
9      SET FOREIGN_KEY_CHECKS = 1;
10
11 •     CREATE TABLE ExamTypes (
12         ExamTypeID    TINYINT PRIMARY KEY,
13         ExamTypeName  VARCHAR(10) NOT NULL
14     );
15
16 •     CREATE TABLE ScoreTypes (
17         ScoreTypeID   TINYINT PRIMARY KEY,
18         ScoreTypeName VARCHAR(45) NOT NULL UNIQUE
19     );
20
21 •     CREATE TABLE Institutions (
22         InstitutionID      INT AUTO_INCREMENT PRIMARY KEY,
23         Institutions        VARCHAR(255) NOT NULL,
24         FundingType         VARCHAR(45),
25         PublicPrivate       VARCHAR(45),
```

```
26     Flagship      VARCHAR(10),
27     Tier          VARCHAR(45),
28     TierTestBand  VARCHAR(45),
29     USNewsTop100Rank INT,
30     AdmissionsRate DOUBLE,
31     TotalUndergraduates INT,
32     InStateTuition  INT,
33     OutStateTuition INT
34 );
35
36 • Ⓜ CREATE TABLE IncomeDistributions (
37     IncomeDistributionsID INT AUTO_INCREMENT PRIMARY KEY,
38     InstitutionID        INT NOT NULL,
39     IncomeBracket         TINYINT NOT NULL, -- 1..5
40     IncomePercent         DOUBLE,
41     FOREIGN KEY (InstitutionID)
42         REFERENCES Institutions(InstitutionID)
43 );
44
45 • Ⓜ CREATE TABLE ExamScores (
46     ExamScoreID    INT AUTO_INCREMENT PRIMARY KEY,
47     Percentile     ENUM('25','50','75') NOT NULL,
48     ScoreValue     INT,
49     InstitutionID INT NOT NULL,
50     ExamTypeID    TINYINT NOT NULL,
51     ScoreTypeID   TINYINT NOT NULL,
52
53     FOREIGN KEY (InstitutionID)
54         REFERENCES Institutions(InstitutionID),
55     FOREIGN KEY (ExamTypeID)
56         REFERENCES ExamTypes(ExamTypeID),
57     FOREIGN KEY (ScoreTypeID)
58         REFERENCES ScoreTypes(ScoreTypeID)
59 );
60
```

9. SQL CODES OF THE SYSTEM

Insertions:

```
1 •  INSERT INTO ExamTypes (ExamTypeID, ExamTypeName)
2     VALUES
3     (1, 'SAT'),
4     (2, 'ACT');
5
6 •  INSERT INTO ScoreTypes (ScoreTypeID, ScoreTypeName)
7     VALUES
8     (1, 'Math'),
9     (2, 'Verbal'),
10    (3, 'Writing'),
11    (4, 'Composite'),
12    (5, 'Average'),
13    (6, 'English'); -- ACT English için
```

```
25 • Ⓛ INSERT INTO Institutions (
26     Institutions,
27     FundingType,
28     PublicPrivate,
29     Flagship,
30     Tier,
31     TierTestBand,
32     USNewsTop100Rank,
33     AdmissionsRate,
34     TotalUndergraduates,
35     InStateTuition,
36     OutStateTuition
37 )
38     SELECT
39         uts.Institution,
40         uts.Funding_Type,
41         uts.`Public/Private`,
42         uts.Flagship,
43         uts.Tier,
44         uts.Tier_TestBand,
45         CASE
46             WHEN uts.USnewsTop100Rank = 'NA' OR uts.USnewsTop100Rank IS NULL
47                 THEN NULL
48                 ELSE CAST(uts.USnewsTop100Rank AS SIGNED)
49             END,
50         uts.Admissions_Rate,
51         uts.Total_Undergraduates,
```

```
58 • ⚒ INSERT INTO IncomeDistributions (
59     InstitutionID,
60     IncomeBracket,
61     IncomePercent
62 )
63     SELECT i.InstitutionID, 1, uts.Income_1_Percent
64     FROM university_test_scores uts
65     JOIN Institutions i ON i.Institutions = uts.Institution
66     WHERE uts.Income_1_Percent IS NOT NULL
67
68     UNION ALL
69     SELECT i.InstitutionID, 2, uts.Income_2_Percent
70     FROM university_test_scores uts
71     JOIN Institutions i ON i.Institutions = uts.Institution
72     WHERE uts.Income_2_Percent IS NOT NULL
73
74     UNION ALL
75     SELECT i.InstitutionID, 3, uts.Income_3_Percent
76     FROM university_test_scores uts
77     JOIN Institutions i ON i.Institutions = uts.Institution
78     WHERE uts.Income_3_Percent IS NOT NULL
79
80     UNION ALL
81     SELECT i.InstitutionID, 4, uts.Income_4_Percent
82     FROM university_test_scores uts
83     JOIN Institutions i ON i.Institutions = uts.Institution
84     WHERE uts.Income_4_Percent IS NOT NULL
```

```
94 • ① INSERT INTO ExamScores (
95     ExamTypeID,
96     ScoreTypeID,
97     InstitutionID,
98     Percentile,
99     ScoreValue
100 )
101
102     -- SAT VERBAL
103     SELECT et.ExamTypeID, st.ScoreTypeID, i.InstitutionID, '25',
104             CAST(uts.SAT_Verbal_25 AS UNSIGNED)
105     FROM university_test_scores uts
106     JOIN Institutions i  ON i.Institutions    = uts.Institution
107     JOIN ExamTypes   et  ON et.ExamTypeName = 'SAT'
108     JOIN ScoreTypes  st  ON st.ScoreTypeName = 'Verbal'
109     WHERE uts.SAT_Verbal_25 REGEXP '^[0-9]+$'
110
111     UNION ALL
112     SELECT et.ExamTypeID, st.ScoreTypeID, i.InstitutionID, '50',
113             CAST(uts.SAT_Verbal_50 AS UNSIGNED)
114     FROM university_test_scores uts
115     JOIN Institutions i  ON i.Institutions    = uts.Institution
116     JOIN ExamTypes   et  ON et.ExamTypeName = 'SAT'
117     JOIN ScoreTypes  st  ON st.ScoreTypeName = 'Verbal'
118     WHERE uts.SAT_Verbal_50 REGEXP '^[0-9]+$'
```

Stored Procedures SQL Codes:

The screenshot shows a MySQL Workbench interface with multiple tabs at the top: sql1, sql2, sql3*, sql4*, and SQL File 10*. The sql3* tab is active. Below the tabs is a toolbar with various icons for file operations, search, and database management. The main area contains the SQL code for a stored procedure:

```
4    -- Returns all exam score records for a given institution.
5    DELIMITER $$

6

7 • CREATE PROCEDURE GetInstitutionExamScores (
8     IN pInstitutionName VARCHAR(255)
9 )
10 BEGIN
11     SELECT
12         i.Institutions          AS InstitutionName,
13         et.ExamTypeName        AS ExamType,
14         st.ScoreTypeName       AS ScoreType,
15         es.Percentile,
16         es.ScoreValue
17     FROM ExamScores es
18     JOIN Institutions i ON es.InstitutionID = i.InstitutionID
19     JOIN ExamTypes et ON es.ExamTypeID = et.ExamTypeID
20     JOIN ScoreTypes st ON es.ScoreTypeID = st.ScoreTypeID
21     WHERE i.Institutions = pInstitutionName
22     ORDER BY
23         et.ExamTypeName,
24         st.ScoreTypeName,
25         es.Percentile;
26 END$$

27

28 DELIMITER ;
```

sql1 sql2 sql3 x sql4* SQL File 10*

1 DELIMITER \$\$
2 DELIMITER ;
3
4 -- Returns all exam score records for a given institution.
5 DELIMITER \$\$
6
7 • Ⓜ CREATE PROCEDURE GetInstitutionExamScores (
8 IN pInstitutionName VARCHAR(255)
9)
10 BEGIN
11 SELECT
12 i.Institutions AS InstitutionName,
13 et.ExamTypeName AS ExamType,
14 st.ScoreTypeName AS ScoreType,
15 es.Percentile,
16 es.ScoreValue
17 FROM ExamScores es
18 JOIN Institutions i ON es.InstitutionID = i.InstitutionID
19 JOIN ExamTypes et ON es.ExamTypeID = et.ExamTypeID
20 JOIN ScoreTypes st ON es.ScoreTypeID = st.ScoreTypeID
21 WHERE i.Institutions = pInstitutionName
22 ORDER BY
23 et.ExamTypeName,

```
sql1    sq2    sq3    sq4*    SQL File 10*
[File] [New] [Open] [Save] [Save As] [Print] [Dont Limit] [Find] [Replace] [Copy] [Cut] [Paste] [Delete] [Close]
24          st.ScoreTypeName,
25          es.Percentile;
26      END$$
27
28  DELIMITER ;
29
30 #####
31 -- Returns the top N institutions with the highest exam scores for a given exam type, score type, and percentile.
32
33
34  DELIMITER $$

35
36 • Ⓜ CREATE PROCEDURE GetTopInstitutionsByScore (
37     IN pExamTypeName  VARCHAR(10),
38     IN pScoreTypeName VARCHAR(45),
39     IN pPercentile    ENUM('25','50','75'),
40     IN pLimitN        INT
41 )
42 BEGIN
43     SELECT
44         i.InstitutionName AS InstitutionName,
45         et.ExamTypeName AS ExamType,
46         st.ScoreTypeName AS ScoreType,
47         es.Percentile,
48         es.ScoreValue
49     FROM ExamScores es
50     JOIN Institutions i ON es.InstitutionID = i.InstitutionID
51     JOIN ExamTypes et ON es.ExamTypeID = et.ExamTypeID
52     JOIN ScoreTypes st ON es.ScoreTypeID = st.ScoreTypeID
53     WHERE et.ExamTypeName = pExamTypeName
54         AND st.ScoreTypeName = pScoreTypeName
55         AND es.Percentile = pPercentile
56     ORDER BY es.ScoreValue DESC
57     LIMIT pLimitN;
58 END$$
59
60  DELIMITER ;
61
62 • CALL GetTopInstitutionsByScore('SAT', 'Math', '75', 10);
63
64 #####
65
66
67  DELIMITER $$

68
69 • Ⓜ CREATE PROCEDURE InsertExamScore (
```

sql1 sql2 sql3 **sql4*** SQL File 10*

IN pInstitutionName VARCHAR(255),
IN pExamTypeName VARCHAR(10),
IN pScoreTypeName VARCHAR(45),
IN pPercentile ENUM('25','50','75'),
IN pScoreValue INT
)
BEGIN
 DECLARE vInstitutionID INT;
 DECLARE vExamTypeID TINYINT;
 DECLARE vScoreTypeID TINYINT;

 -- InstitutionID bul
 SELECT InstitutionID INTO vInstitutionID
 FROM Institutions
 WHERE Institutions = pInstitutionName
 LIMIT 1;

 -- ExamTypeID bul
 SELECT ExamTypeID INTO vExamTypeID
 FROM ExamTypes
 WHERE ExamTypeName = pExamTypeName
 LIMIT 1;
92

sql1 sql2 sql3 x sql4* SQL File 10*

93 -- ScoreTypeID bul
94 SELECT ScoreTypeID INTO vScoreTypeID
95 FROM ScoreTypes
96 WHERE ScoreTypeName = pScoreTypeName
97 LIMIT 1;
98
99 -- Insert işlemi
100 INSERT INTO ExamScores (

101 ExamTypeID,
102 ScoreTypeID,
103 InstitutionID,
104 Percentile,
105 ScoreValue
106)
107 VALUES (

108 vExamTypeID,
109 vScoreTypeID,
110 vInstitutionID,
111 pPercentile,
112 pScoreValue
113);
114 END\$\$
115

116 DELIMITER ;
117
118