****

**College of Science, Technology & Applied Arts of Trinidad & Tobago**

**DEPARTMENT OF**

**GROUP ASSIGNMENT COVER PAGE**

**ASSIGNMENT TITLE: FINAL PROJECT**

**ASSIGNMENT SUBTITLE: DATABASE FOR CODER’S SECONDARY SCHOOL**

**COURSE CODE: ITEC 372**

**COURSE TITLE: DATABASE PROGRAMMING WITH SQL**

**CRN: 14879 SEMESTER: 1**

**STUDENT NAME STUDENT I.D. PROGRAMME**

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**DATE OF SUBMISSION: 27/12/2017**

**LECTURER’S NAME: A. DENNIS-NAGEE**

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# Company Description & history

Coder’s Secondary has 4 schools locations across the Trinidad and Tobago. There is one all-male, one all-female and 2 mixed schools. The schools are located in the areas of San Fernando, Couva, Debe and Gasparillo.

The institution has five levels, ranging from forms 1-5. The institution was founded by Adrian John and Jared Clarke in the year of 1995. Since 1995 we have developed 4 locations to provide high quality education to a variety of students.

# Purpose

The main purpose of developing this database is to provide accurate information to the institution to make adequate decisions. Since the institution is working with large sums of data, it is hard to process them all.

# Scope

This creation of this database will mainly revolve around the teachers, students and classes taught at the organization. It mainly focuses on the operations of a student studying at the institution.

# Length of Time Our Solution is Valid

Our solution is viable decades to come. Even if the institution expands or decreases in size, our database solution can easily modify the data accordingly.

# Business Rules

There are 4 secondary schools.

A secondary school can be either same sex or mixed **(2 mixed, 1 male, 1 female)**

A school can have many teachers, one teacher can only teach at one school.

A school can have many departments; one teacher must belong to one department.

A school can have many students; a student must only belong to only one school location.

A subject can be taught by many different teachers, a teacher can only teach one subject.

A teacher can teach many classes

A teacher only belong to one department, but there are many teachers in a department(at lease 3)

A subject can have many class, one class must be of a particular subject.

A student can enroll in many classes; one class can have many students.

# Questions \ Problems\Queries

**At the end of an academic year, members of staff agree to reward good work. They would like a way to easily determine the top performing students.**

1. **Which student has the highest GPA at the end of an academic year overall?**

**SELECT** STUDENT\_ID**,** FIRST\_NAME**,** LAST\_NAME**,** GPA

**FROM** STUDENTS

**WHERE** GPA **=** **(SELECT** **MAX(**GPA**)**

**FROM** STUDENTS**);**

1. **What is the highest GPA at the end of an academic year at each location?**

**SELECT** LOCATION\_ID**,** **MAX(**GPA**)**"HIGHEST GPA IN LOCATION"

**FROM** STUDENTS

**WHERE** GPA **!=** 0.0

**GROUP** **BY** LOCATION\_ID**;**

1. **Which male/s AND female/s students have the highest GPA of all four locations?**

**SELECT** STUDENT\_ID**,**FIRST\_NAME**,**LAST\_NAME**,**GPA**,**LOCATION\_ID**,**GENDER

**FROM** STUDENTS

**WHERE** GPA **IN** **(SELECT** **MAX(**GPA**)**

**FROM** STUDENTS

**GROUP** **BY** GENDER**);**

1. **What is the average grade of each subject in all the schools? – Find the average grade for a subject (e.g. math) for all schools.**

**SELECT** c**.**SUBJECT\_ID**,** s**.**TITLE**,** **ROUND** **(AVG(**e**.**GRADE**),**2**)**"AVERAGE GRADE OF SUBJECT"

**FROM** CLASSES c **JOIN** ENROLLMENTS e **ON(**e**.**CLASS\_ID**=**c**.**CLASS\_ID**)** **JOIN** SUBJECTS s **ON(**s**.**SUBJECT\_ID**=**c**.**SUBJECT\_ID**)**

**GROUP** **BY** c**.**SUBJECT\_ID**,**s**.**TITLE

**ORDER** **BY** c**.**SUBJECT\_ID**;**

1. **What is the highest grade of each subject in all the schools?**

**SELECT** c**.**SUBJECT\_ID**,** s**.**TITLE**,** **ROUND** **(MAX(**e**.**GRADE**),**2**)**"MAX GRADE OF SUBJECT"

**FROM** CLASSES c **JOIN** ENROLLMENTS e **ON(**e**.**CLASS\_ID**=**c**.**CLASS\_ID**)** **JOIN** SUBJECTS s **ON(**s**.**SUBJECT\_ID**=**c**.**SUBJECT\_ID**)**

**GROUP** **BY** c**.**SUBJECT\_ID**,**s**.**TITLE

**ORDER** **BY** c**.**SUBJECT\_ID**;**

1. **Which student/s got the highest in a class of all locations?**

**SELECT** CLASS\_ID**,**STUDENT\_ID**,**FIRST\_NAME**,**LAST\_NAME**,**GRADE

**FROM** STUDENTS **NATURAL** **JOIN** ENROLLMENTS

**WHERE** GRADE **IN(SELECT** **MAX(**GRADE**)**

**FROM** ENROLLMENTS

**GROUP** **BY** CLASS\_ID**)**

**ORDER** **BY** CLASS\_ID**;**

1. **What is the average performance of each level at the end of a year of all locations?**

**SELECT** STU\_LEVEL "STUDENT LEVEL"**,** **ROUND(AVG(**GPA**),**2**)**"GRADE POINT AVERAGE"

**FROM** STUDENTS

**GROUP** **BY** STU\_LEVEL

**ORDER** **BY** STU\_LEVEL**;**

1. **What is the highest GPA of all levels of all locations?**

E.g.: location 1 level 1 vs location 2 level 1 ect

**SELECT** STU\_LEVEL"STUDENT LEVEL"**,** **MAX(**GPA**)**"HIGHEST GPA OF THAT LEVEL"

**FROM** STUDENTS

**GROUP** **BY** STU\_LEVEL

**ORDER** **BY** STU\_LEVEL**;**

1. **Which gender presently has the higher average GPA between males and females?**

**SELECT** **CASE** GENDER

**WHEN** 'M' **THEN** 'MALES HAS A HIGHER AVERAGE GPA OF '**||** **ROUND(AVG(**GPA**),**3**)**

**ELSE** 'FEMALES HAS A HIGHER AVERAGE GPA OF '**||** **ROUND(AVG(**GPA**),**3**)**

**END** "HIGHEST AVERAGE GPA"

**FROM** STUDENTS

**HAVING** **AVG(**GPA**)=** **(SELECT** **MAX(AVG(**GPA**))**

**FROM** STUDENTS

**GROUP** **BY** GENDER**)**

**GROUP** **BY** GENDER**;**

1. **Which gender has more grade A’s males of females?**

**SELECT** **COUNT(**e**.**GRADE**)**"AMOUNT OF A'S" **,**s**.**GENDER

**FROM** ENROLLMENTS e **JOIN** STUDENTS s **ON(**e**.**STUDENT\_ID**=**s**.**STUDENT\_ID**)**

**WHERE** e**.**GRADE **>=**90

**HAVING** **COUNT(**e**.**GRADE**)** **=** **(SELECT** **MAX(COUNT(**e**.**GRADE**))**

**FROM** ENROLLMENTS e **JOIN** STUDENTS s

**ON(**e**.**STUDENT\_ID**=**s**.**STUDENT\_ID**)**

**WHERE** e**.**GRADE **>=**90

**GROUP** **BY** s**.**GENDER**)**

**GROUP** **BY** s**.**GENDER**;**

**Members of staff dearly care about their students. At the end of the year, all students who’s GPA drops below 2.0 will have a meeting together along with their teachers, school principal and parents.**

1. **Which students have a GPA below 2.0 and present have failed a course (70% or less)?**

**SELECT** STUDENT\_ID**,**FIRST\_NAME**,**LAST\_NAME**,**GPA**,**LOCATION\_ID**,**GENDER**,**GRADE "FAILING GRADES"

**FROM** STUDENTS **NATURAL** **JOIN** ENROLLMENTS

**WHERE** GPA**<**2 **AND** GRADE**<**70**;**

**If a teacher fail to deliver, her class would have a very low pass rate. Since the school is dedicate on producing the best performance possible from student, if a teacher’s pass rate is below 40% they are sent for extra training. The school is quite large and has a hard time finding the teachers with poor results every year.**

1. **Which of all the teachers have a pass rate of below 70%?**

**SELECT** TEACHER\_ID**,**FIRST\_NAME**,**LAST\_NAME**,**LOCATION\_ID

**FROM** TEACHERS

**WHERE** TEACHER\_ID **IN**

**(SELECT** c**.**TEACHER\_ID

**FROM** ENROLLMENTS e **JOIN** CLASSES c **ON**

**(**e**.**CLASS\_ID**=**c**.**CLASS\_ID**)**

**HAVING** **AVG(**GRADE**)<**70

**GROUP** **BY** c**.**TEACHER\_ID**);**

**The institution also like to reward their hard working teachers. They need a way to easily find the best performing teachers**.

1. **Which teacher have the highest pass rate of all locations?**

**CREATE** **VIEW** HIGH\_PASS\_RATE **AS** **(SELECT** c**.**TEACHER\_ID**,** **AVG(**e**.**GRADE**)** **AS** "AVG\_GRADE"

**FROM** ENROLLMENTS e **JOIN** CLASSES c **ON** **(**e**.**CLASS\_ID**=**c**.**CLASS\_ID**)**

**GROUP** **BY** c**.**TEACHER\_ID**);**

**SELECT** h**.**TEACHER\_ID**,**AVG\_GRADE**,**FIRST\_NAME**,**LAST\_NAME

**FROM** HIGH\_PASS\_RATE h **JOIN** TEACHERS t **ON** **(**h**.**TEACHER\_ID**=**t**.**TEACHER\_ID**)**

**WHERE** AVG\_GRADE**=(SELECT** **MAX(**AVG\_GRADE**)** **FROM** HIGH\_PASS\_RATE**);**

**Although the 4 schools are one institution, they are quite competitive with each other. Each year they have a hard time finding out which school has the best grades and which school has the worst.**

1. **Which school has the highest average GPA at the end of the academic year?**

**SELECT** LOCATION\_ID**,ROUND(AVG** **(**GPA**),**2**)**"HIGHEST LOCATION GPA"

**FROM** STUDENTS

**HAVING** **AVG(**GPA**)** **=(SELECT** **MAX(AVG(**GPA**))**

**FROM** STUDENTS

**GROUP** **BY** LOCATION\_ID**)**

**GROUP** **BY** LOCATION\_ID**;**

1. **Which school has the lowest average GPA?**

**SELECT** LOCATION\_ID**,ROUND(AVG** **(**GPA**),**2**)**"lOWEST LOCATION GPA"

**FROM** STUDENTS

**HAVING** **AVG(**GPA**)** **=(SELECT** **MIN(AVG(**GPA**))**

**FROM** STUDENTS

**GROUP** **BY** LOCATION\_ID**)**

**GROUP** **BY** LOCATION\_ID**;**

**When a teacher is employed for 20 years they get an award to celebrate this milestone.**

1. **Which teacher will be celebrating 20 years employment for the coming year?**

**SELECT** TEACHER\_ID**,**FIRST\_NAME**,**LAST\_NAME**,**LOCATION\_ID**,**HIRE\_DATE

**FROM** TEACHERS

**WHERE** **EXTRACT** **(YEAR** **FROM** **ADD\_MONTHS(**HIRE\_DATE**,**240**))** **=** **EXTRACT** **(YEAR** **FROM** **SYSDATE)** **OR** **EXTRACT** **(YEAR** **FROM** **ADD\_MONTHS(**HIRE\_DATE**,**240**))** **=** **EXTRACT** **(YEAR** **FROM** **SYSDATE)**+1**;**

**The institution gain and loss members every year both students and teachers. Members of staff have a hard time estimating the population of students and teachers to buy accurate amount of meals and furniture etc.**

1. **What is the amount of students in each location and the address of that school?**

**SELECT** s**.**LOCATION\_ID**,(SELECT** ADDRESS **FROM** LOCATIONS l **WHERE** s**.**LOCATION\_ID**=**L**.**LOCATION\_ID**)** "ADDRESS OF SCHOOL"**,COUNT(**STUDENT\_ID**)**"NO. OF STUDENTS"

**FROM** STUDENTS s

**GROUP** **BY** LOCATION\_ID

**ORDER** **BY** LOCATION\_ID**;**

1. **What is the amount of teachers in each location and the address of that school?**

**SELECT** t**.**LOCATION\_ID**,(SELECT** ADDRESS **FROM** LOCATIONS l **WHERE** t**.**LOCATION\_ID**=**L**.**LOCATION\_ID**)** "ADDRESS OF SCHOOL"**,COUNT(**TEACHER\_ID**)**"NO. OF TEACHERS"

**FROM** TEACHERS t

**GROUP** **BY** LOCATION\_ID

**ORDER** **BY** LOCATION\_ID**;**

**Each department must have at least 3 teachers per school if it has less; it means there is a shortage of teachers.**

1. **Which department has less than 3 teachers in each school?**

**SELECT** LOCATION\_ID**,**DEPARTMENT\_ID "DEPARTMENT"**,COUNT(**TEACHER\_ID**)**"NO OF TEACHERS IN DEPARTMENT"

**FROM** TEACHERS

**HAVING** **COUNT(**TEACHER\_ID**)<**3

**GROUP** **BY** LOCATION\_ID**,**DEPARTMENT\_ID

**ORDER** **BY** LOCATION\_ID**,**DEPARTMENT\_ID**;**

**Annually bonus is given to teachers every year. If a teacher is working for 4000 or less they get a Christmas bonus of 20% all other teacher gets a bonus of 10%.**

1. **What will be the new salary of the teachers after the Christmas bonus.**

**SELECT** TEACHER\_ID**,**FIRST\_NAME**,**LAST\_NAME**,**SALARY**,**

**CASE** **WHEN** SALARY**>**4000 **THEN**

**TO\_CHAR(**SALARY**\***1.2**,**'999,999,999.99'**)**

**ELSE** **TO\_CHAR(**SALARY**\***1.1**,**'999,999,999.99'**)**

**END** **AS** "NEW SALARY WITH BONUS"

**FROM** TEACHERS

**ORDER** **BY** TEACHER\_ID**;**

# Relationships

1. One School has many teachers and a teacher could only teach at one school.

**Teachers**

**School**

1. A subject can be taught by many teachers, a teacher can teach one subject.

**Subject**

**Teacher**

1. A teacher must belong to one department, there can be many teachers in a department

**Department**

**Teacher**

1. A school can have many students, a student must only belong to only one school location.

**School**

**Students**

1. A subject can be taught by many different teachers, a teacher can only teach one subject

**Subject**

**Teachers**

1. A subject can have many class, one class must be of a particular subject

**Subject**

**Class**

1. A student can enroll in many classes, many students can enroll in a class.

ENROLL

**Class**

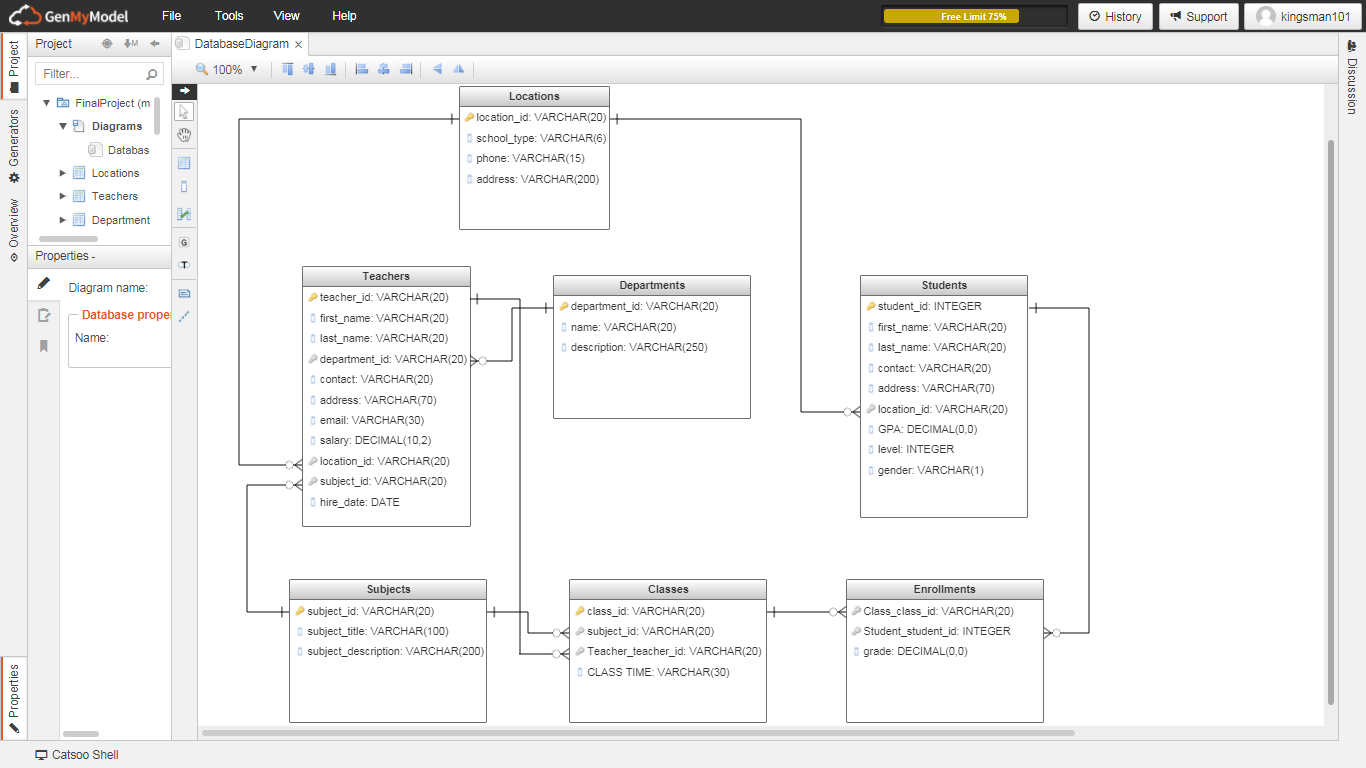
**Student**

# Entity Relational Diagram

https://app.genmymodel.com/edit/\_ZTkVMLW0Eee7sYPkE4-GPA#

username: kingsman101

password: password12345



# Primary & Foreign Keys

|  |  |  |
| --- | --- | --- |
| **Table Name/Entities** | **Primary Key** | **Foreign Keys** |
| LOCATIONS | LOCATION\_ID | NONE |
| TEACHERS | TEACHER\_ID | * DEPARTMENT\_ID * SUBJECT\_ID * LOCATION\_ID |
| SUBJECTS | SUBJECT\_ID | NONE |
| CLASSES | CLASS\_ID | * SUBJECT\_ID * TEACHER\_ID |
| DEPARTMENTS | DEPARTMENT\_ID | NONE |
| STUDENTS | STUDENT\_ID | * LOCATION\_ID |
| ENROLLMENTS | * CLASS\_ID * STUDENT\_ID | * CLASS\_ID * STUDENT\_ID |

# DATA DICTIONARY

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute** | **Datatype** | **Size** | **PK** | **FK** | **Required** | **DESCRIPTION** |
| location\_id | Varchar2 | 20 | x |  | YES | Unique identifier |
| School\_type | Varchar2 | 6 |  |  | YES | Male female or Mixed |
| phone | Varchar2 | 15 |  |  | YES | Phone number of a particular school location |
| address | Varchar2 | 200 |  |  | YES | Address of school |

Table name: LOCATIONS

Table name: SUBJECTS

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute** | **Datatype** | **Size** | **PK** | **FK** | **Required** | **DESCRIPTION** |
| subject\_id | Varchar2 | 20 | x |  | YES | Unique identifier |
| title | Varchar2 | 100 |  |  | YES | Title of Subject  E.g. intro to programming 1 |
| description | Varchar2 | 200 |  |  | YES | Description of subject  E.g. Introducing student to java basics. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute** | **Datatype** | **Size** | **PK** | **FK** | **Required** | **DESCRIPTION** |
| Teacher\_id | Varchar2 | 20 | x |  | YES | Unique identifier |
| first\_name | Varchar2 | 20 |  |  | YES | First name of teacher |
| last\_name | Varchar2 | 20 |  |  | YES | Last name of teacher |
| Department\_id | Varchar2 | 20 |  | x |  | Foreign key to link department table |
| contact | Varchar2 | 20 |  |  | YES | Phone number of teacher |
| email | Varchar2 | 30 |  |  | YES | Email of teacher |
| Address | Varchar2 | 70 |  |  | NO | Address of teacher |
| Salary | Double |  |  |  | YES | Salary of teacher |
| subject\_id | Varchar2 | 20 |  | x |  | Foreign key to link subject table.  This is the subject the teacher teaches |
| Hire\_date | date |  |  |  | YES | Date in which the employee was hired |
| Location\_id | Varchar2 | 20 |  | x | YES | The location where the teacher teaches |

Table name: TEACHERS

Table name: Classes

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute** | **Datatype** | **Size** | **PK** | **FK** | **Required** | **DESCRIPTION** |
| Class\_id | Varchar2 | 20 | x |  | YES | Unique identifier |
| Teacher\_id | Varchar2 | 20 |  | x | YES | Foreign key to link to teacher table |
| Subject\_id | Varchar2 | 20 |  | x | YES | Foreign key to link to subject table |
| Class\_time | Varchar2 | 30 |  |  | NO | Time of the class eg mon 5-8 |

Table name: DEPARTMENTS

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute** | **Datatype** | **Size** | **PK** | **FK** | **Required** | **DESCRIPTION** |
| Department\_id | Varchar2 | 20 | x |  | YES | Unique identifier |
| name | Varchar2 | 20 |  |  | YES | Name of department |
| Description | Varchar2 | 70 |  |  | YES | Description of department |

Table name: STUDENTS

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute** | **Datatype** | **Size** | **PK** | **FK** | **Required** | **DESCRIPTION** |
| Student\_id | Number |  | x |  | YES | Unique identifier /auto increment |
| first\_name | Varchar2 | 20 |  |  | YES | First name of teacher |
| last\_name | Varchar2 | 20 |  |  | YES | Last name of teacher |
| contact | Varchar2 | 20 |  |  | YES | Phone number of student |
| Address | Varchar2 | 200 |  |  | YES | Address of Student |
| location\_id | Varchar2 | 20 |  | x | YES | Hours worked for the week |
| GPA | Number | (3.2) |  |  | NO | Grade point average of student |
| level | Integer |  |  |  | YES | Level of student e.g form 1, 2 ect |
| Gender | Varchar2 | 1 |  |  | YES | Male or female |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute** | **Datatype** | **Size** | **PK** | **FK** | **Required** | **DESCRIPTION** |
| Student\_id | Integer | (30,0) |  | x | YES | Foreign key links to student table |
| class\_id | Varchar2 | 20 |  | x | YES | Foreign key links to class offered table |
| Grade | Number | (5.2) |  |  | NO | Grade of a particular student for a particular course |

Table name: ENROLLMENTS

Composite primary key

# Normalised Tables (3NF)

Locations

|  |  |  |  |
| --- | --- | --- | --- |
| **Location\_id** | school\_type | phone | address |

Departments

|  |  |  |
| --- | --- | --- |
| **department\_id** | name | description |

Teachers

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **teacher\_id** | first\_name | last\_name | *Department\_id* | Contact | Address | Email | Salary | *Location\_id* | *Subject\_id* | Hire\_date |

Students

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Student\_id** | First\_name | Last\_name | Contact | Address | Location\_id | GPA | Level | Gender |

Subjects

|  |  |  |
| --- | --- | --- |
| **Subject\_id** | Subject\_title | Subject\_description |

Classes

|  |  |  |  |
| --- | --- | --- | --- |
| **Class\_id** | *Subject\_id* | *Teacher\_id* | Class\_time |

Enrollments

|  |  |  |
| --- | --- | --- |
| ***class\_id*** | ***Student\_id*** | grade |

# DDL

/\*-------------------------DDL DATA DEFINATION LANGUAGE--------------- \*/

/\*CREATING LOCATIONS TABLE\*/

**CREATE** **TABLE** LOCATIONS**(**

LOCATION\_ID **VARCHAR2(**20**)** **CONSTRAINT** location\_school\_id\_pk **PRIMARY** **KEY,**

SCHOOL\_TYPE **VARCHAR2** **(**6**)** **NOT** **NULL,**

PHONE **VARCHAR2** **(**15**)NOT** **NULL,**

ADDRESS **VARCHAR2** **(**200**)** **NOT** **NULL**

**);**

/\*CREATING LOCATIONS TABLE\*/

**CREATE** **TABLE** DEPARTMENTS**(**

DEPARTMENT\_ID **VARCHAR(**20**)** **CONSTRAINT** departments\_department\_id\_pk **PRIMARY** **KEY,**

NAME **VARCHAR2** **(**20**)** **NOT** **NULL,**

DESCRIPTION **VARCHAR2** **(**250**)NOT** **NULL**

**);**

/\*CREATING SUBJECT TABLE\*/

**CREATE** **TABLE** SUBJECTS**(**

SUBJECT\_ID **VARCHAR2(**20**)** **CONSTRAINT** subjects\_subject\_id\_pk **PRIMARY** **KEY,**

TITLE **VARCHAR2** **(**100**)** **NOT** **NULL,**

DESCRIPTION **VARCHAR2** **(**200**)NOT** **NULL**

**);**

/\*CREATING TEACHER TABLE\*/

**CREATE** **TABLE** TEACHERS**(**

TEACHER\_ID **VARCHAR2(**20**)** **CONSTRAINT** teachers\_teacher\_id\_pk **PRIMARY** **KEY,**

FIRST\_NAME **VARCHAR2** **(**20**)** **NOT** **NULL,**

LAST\_NAME **VARCHAR2** **(**20**)NOT** **NULL,**

DEPARTMENT\_ID **VARCHAR2** **(**20**),**

CONTACT **VARCHAR2** **(**20**)** **NOT** **NULL,**

ADDRESS **VARCHAR2** **(**70**)** **NOT** **NULL,**

EMAIL **VARCHAR2** **(**30**)** **NOT** **NULL,**

SALARY **DECIMAL** **(**10**,**2**)** **NOT** **NULL,**

location\_ID **VARCHAR2** **(**20**)NOT** **NULL,**

SUBJECT\_ID **VARCHAR2** **(**20**)NOT** **NULL,**

HIRE\_DATE **DATE** **NOT** **NULL,**

**CONSTRAINT** teachers\_department\_id\_fk **FOREIGN** **KEY** **(**DEPARTMENT\_ID**)** **REFERENCES** DEPARTMENTS**(**DEPARTMENT\_ID**),**

**CONSTRAINT** teachers\_location\_id\_fk **FOREIGN** **KEY** **(**location\_ID**)** **REFERENCES** LOCATIONS**(**location\_ID**),**

**CONSTRAINT** teachers\_subject\_id\_fk **FOREIGN** **KEY** **(**SUBJECT\_ID**)** **REFERENCES** SUBJECTS**(**SUBJECT\_ID**)**

**);**

/\*CREATING STUDENTS TABLE\*/

**CREATE** **TABLE** STUDENTS**(**

STUDENT\_ID **INTEGER** **CONSTRAINT** students\_student\_id\_pk **PRIMARY** **KEY,**

FIRST\_NAME **VARCHAR2** **(**20**)** **NOT** **NULL,**

LAST\_NAME **VARCHAR2** **(**20**)NOT** **NULL,**

CONTACT **VARCHAR2** **(**20**),**

ADDRESS **VARCHAR2** **(**200**),**

LOCATION\_ID **VARCHAR2** **(**20**)NOT** **NULL,**

STU\_LEVEL **INTEGER,**

GPA **DECIMAL(**3**,**2**),**

gender **varchar2(**1**)**

**FOREIGN** **KEY** **(**LOCATION\_ID**)** **REFERENCES** LOCATIONS**(**LOCATION\_ID**)**

**);**

/\*CREATING CLASSES TABLE\*/

**CREATE** **TABLE** CLASSES**(**

CLASS\_ID **VARCHAR(**20**)** **PRIMARY** **KEY,**

SUBJECT\_ID **VARCHAR2** **(**20**)** **NOT** **NULL,**

TEACHER\_ID **VARCHAR2** **(**20**)NOT** **NULL,**

CLASS\_TIME **VARCHAR2(**20**)** **NOT** **NULL,**

**FOREIGN** **KEY** **(**SUBJECT\_ID**)** **REFERENCES** SUBJECTS**(**SUBJECT\_ID**),**

**FOREIGN** **KEY** **(**TEACHER\_ID**)** **REFERENCES** TEACHERS**(**TEACHER\_ID**)**

**);**

/\*CREATING ENROLLMENTS TABLE\*/

**CREATE** **TABLE** ENROLLMENTS**(**

CLASS\_ID **VARCHAR2(**20**)NOT** **NULL,**

STUDENT\_ID **NUMBER** **(**30**)** **NOT** **NULL,**

GRADE **DECIMAL(**4**,**2**),**

**FOREIGN** **KEY** **(**STUDENT\_ID**)** **REFERENCES** STUDENTS**(**STUDENT\_ID**),**

**FOREIGN** **KEY** **(**CLASS\_ID**)** **REFERENCES** CLASSES**(**CLASS\_ID**),**

**CONSTRAINT** enrollments\_pk **PRIMARY** **KEY(**STUDENT\_ID**,**CLASS\_ID**)**

**);**

# DML

/\*-------------------------DML DATA MANIPULATION LANGUAGE----------------- \*/

/\*INSERTING DATA INTO LOCATIONS TABLE (4 LOCATIONS)\*/

**INSERT** **INTO** LOCATIONS **VALUES** **(**'l1'**,**'male'**,**'1-868-324-2342'**,**'#121 Charles Street San Fernando Trinidad'**);**

**INSERT** **INTO** LOCATIONS **VALUES** **(**'l2'**,**'female'**,**'1-868-724-1142'**,**'#41 David Street Couva Trinidad'**);**

**INSERT** **INTO** LOCATIONS **VALUES** **(**'l3'**,**'mixed'**,**'1-868-624-9942'**,**'#45 Sutton Street Gasparillo Trinidad'**);**

**INSERT** **INTO** LOCATIONS **VALUES** **(**'l4'**,**'mixed'**,**'1-868-224-2645'**,**'#166 Ping Street Debe Trinidad'**);**

/\*INSERTING DATA INTO DEPARTMENTS TABLE (3 DEPARTMENTS)\*/

**INSERT** **INTO** DEPARTMENTS **VALUES(**'d1'**,**'Mathematics'**,**'The study of topics such as quantity (numbers), structure, space, and change.'**);**

**INSERT** **INTO** DEPARTMENTS **VALUES(**'d2'**,**'Science'**,**'A branch of knowledge or study dealing with a body of facts or truths systematically arranged and showing the operation of general laws.'**);**

**INSERT** **INTO** DEPARTMENTS **VALUES(**'d3'**,**'Information Technology'**,**'Computers to store, study, retrieve, transmit and manipulate data'**);**

/\*INSERTING DATA INTO SUBJECTS TABLE (9 SUBJECTS)\*/

/\*Mathematics department subjects\*/

**INSERT** **INTO** SUBJECTS **VALUES** **(**'s1'**,**'Intro to Algebra'**,**'Basics of Algebra for lower level students.'**);**

**INSERT** **INTO** SUBJECTS **VALUES** **(**'s2'**,**'Calculas'**,**'The study of differentials and integrals will be based'**);**

**INSERT** **INTO** SUBJECTS **VALUES** **(**'s3'**,**'Geometry'**,**'Calculation of areas and perimenters'**);**

/\*Science department subjects\*/

**INSERT** **INTO** SUBJECTS **VALUES** **(**'s4'**,**'Physics'**,**'Understanding why things do what they do.'**);**

**INSERT** **INTO** SUBJECTS **VALUES** **(**'s5'**,**'Chemistry'**,**'The study of all chemicals'**);**

**INSERT** **INTO** SUBJECTS **VALUES** **(**'s6'**,**'Agriculture'**,**'The study of plants.'**);**

/\*IT department Subjects\*/

**INSERT** **INTO** SUBJECTS **VALUES** **(**'s7'**,**'Introduction to Programming'**,**'Fundamentals of using the Java programming language.'**);**

**INSERT** **INTO** SUBJECTS **VALUES** **(**'s8'**,**'Introduction to Computer Hardware'**,**'Fundamentals hardware devices'**);**

**INSERT** **INTO** SUBJECTS **VALUES** **(**'s9'**,**'Introduction to Web Design'**,**'Building static webpages'**);**

/\*INSERTING DATA INTO TEACHERS TABLE\*/

/\*SCHOOL 1\*/

/\*Maths Department 1, School 1\*/

**INSERT** **INTO** TEACHERS **VALUES** **(**'t1'**,**'Sona'**,**'James'**,**'d1'**,**'1 868 324-2132'**,**'#1 Tom drive San Fernando'**,**'teach1@gmail.com'**,**10000.00**,**'l1'**,**'s1'**,**'12-Nov-1997'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t2'**,**'Bob'**,**'Pane'**,**'d1'**,**'1 868 687-7789'**,**'#12 Charles Street Couva'**,**'teach2@gmail.com'**,**3000.00**,**'l1'**,**'s3'**,**'02-Jan-1998'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t3'**,**'Peter'**,**'Doi'**,**'d1'**,**'1 868 667-1332'**,**'#109 Southern Main Road Debe'**,**'teach3@gmail.com'**,**5000.00**,**'l1'**,**'s2'**,**'19-Sep-1998'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t4'**,**'Tom'**,**'NewMan'**,**'d1'**,**'1 868 324-2132'**,**'#101 NewTown drive Arima'**,**'teach4@gmail.com'**,**11000.00**,**'l1'**,**'s3'**,**'21-Sep-2002'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t5'**,**'Sam'**,**'Bob'**,**'d1'**,**'1 868 324-2132'**,**'#122 Johnson Street POS'**,**'teach5@gmail.com'**,**9000.00**,**'l1'**,**'s2'**,**'12-Dec-2001'**);**

/\*Science Department 2 School 1\*/

**INSERT** **INTO** TEACHERS **VALUES** **(**'t6'**,**'Marva'**,**'James'**,**'d2'**,**'1 868 432-2132'**,**'#98 Benjamin Drive Penal'**,**'teach6@gmail.com'**,**9500.00**,**'l1'**,**'s4'**,**'01-Nov-1998'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t7'**,**'Javis'**,**'Rammus'**,**'d2'**,**'1 868 755-7789'**,**'#7 Duke Street Mayaro'**,**'teach7@gmail.com'**,**10000.00**,**'l1'**,**'s5'**,**'02-Dec-1997'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t8'**,**'Polly'**,**'Ahri'**,**'d2'**,**'1 868 787-1332'**,**'#54 Kim Road Siparia'**,**'teach8@gmail.com'**,**15000.00**,**'l1'**,**'s6'**,**'15-Apr-1997'**);**

/\*IT Department 3 School 1\*/

**INSERT** **INTO** TEACHERS **VALUES** **(**'t9'**,**'Sally'**,**'Jeff'**,**'d3'**,**'1 868 124-7892'**,**'#18 Boys Street Chagunas'**,**'teach9@gmail.com'**,**11500.00**,**'l1'**,**'s7'**,**'14-Feb-2004'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t10'**,**'Sonny'**,**'Eve'**,**'d3'**,**'1 868 474-2342'**,**'#67 John Drive Chagunas'**,**'teach10@gmail.com'**,**4100.00**,**'l1'**,**'s7'**,**'30-Jan-2005'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t11'**,**'Bruce'**,**'Wayne'**,**'d3'**,**'1 868 334-9782'**,**'#41 Michael Street Toco'**,**'teach11@gmail.com'**,**11500.00**,**'l1'**,**'s8'**,**'14-Dec-2004'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t12'**,**'Bert'**,**'Kevin'**,**'d3'**,**'1 868 674-8942'**,**'#84 Bane Road Matlot'**,**'teach12@gmail.com'**,**4100.00**,**'l1'**,**'s9'**,**'12-May-2001'**);**

/\*SCHOOL 2\*/

/\*Maths Department 1 School 2\*/

**INSERT** **INTO** TEACHERS **VALUES** **(**'t13'**,**'Paul'**,**'Jackson'**,**'d1'**,**'1 868 755-2345'**,**'#5 Paul Road La Romaine'**,**'teach13@gmail.com'**,**15000.00**,**'l2'**,**'s1'**,**'12-Jul-1999'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t14'**,**'Davis'**,**'Clarke'**,**'d1'**,**'1 868 456-5469'**,**'#34 Gate Street Penal'**,**'teach14@gmail.com'**,**4600.00**,**'l2'**,**'s2'**,**'22-Nov-1996'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t15'**,**'Judy'**,**'Stark'**,**'d1'**,**'1 868 765-2344'**,**'#123 Velmont POS'**,**'teach15@gmail.com'**,**2000.00**,**'l2'**,**'s3'**,**'09-Sep-1997'**);**

/\*science department 2 school 2\*/

**INSERT** **INTO** TEACHERS **VALUES** **(**'t16'**,**'Ariana'**,**'Strongman'**,**'d2'**,**'1 868 656-3456'**,**'#11 Telley Road Mc Bean'**,**'teach16@gmail.com'**,**1900.00**,**'l2'**,**'s4'**,**'09-Oct-2001'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t17'**,**'Marline'**,**'John'**,**'d2'**,**'1 868 567-8977'**,**'#34 Hilltop Street Piarco'**,**'teach17@gmail.com'**,**1100.00**,**'l2'**,**'s5'**,**'14-Aug-2002'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t18'**,**'Keith'**,**'James'**,**'d2'**,**'1 868 567-2345'**,**'#67 John Drive Chagunas'**,**'teach18@gmail.com'**,**4300.00**,**'l2'**,**'s6'**,**'30-Jan-1999'**);**

/\*IT Department 3 School 2\*/

**INSERT** **INTO** TEACHERS **VALUES** **(**'t19'**,**'Johana'**,**'John'**,**'d3'**,**'1 868 124-7892'**,**'#12 Boys Parklane Chagunas'**,**'teach19@gmail.com'**,**5800.00**,**'l2'**,**'s7'**,**'19-Feb-2004'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t20'**,**'Sandra'**,**'Stark'**,**'d3'**,**'1 868 324-4321'**,**'#234 Merryville Debe'**,**'teach20@gmail.com'**,**9000.00**,**'l2'**,**'s7'**,**'17-Jan-2005'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t21'**,**'Akali'**,**'Riven'**,**'d3'**,**'1 868 765-7654'**,**'#101 Townville Arima'**,**'teach21@gmail.com'**,**3600.00**,**'l2'**,**'s8'**,**'27-Dec-2004'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t22'**,**'Bert'**,**'Davis'**,**'d3'**,**'1 868 346-6435'**,**'#96 Lowlance St Cruz'**,**'teach22@gmail.com'**,**1100.00**,**'l2'**,**'s9'**,**'15-Jun-2001'**);**

/\*SCHOOL 3\*/

/\*Maths Department 1 School 3\*/

**INSERT** **INTO** TEACHERS **VALUES** **(**'t23'**,**'Marvin'**,**'Jackson'**,**'d1'**,**'1 868 857-2345'**,**'#82 Villa Road POS'**,**'teach23@gmail.com'**,**2500.00**,**'l3'**,**'s1'**,**'01-Jul-2006'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t24'**,**'Irella'**,**'Clarke'**,**'d1'**,**'1 868 273-3254'**,**'#234 Mike Street San Fernando'**,**'teach24@gmail.com'**,**10000.00**,**'l3'**,**'s2'**,**'05-Nov-2012'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t25'**,**'Karma'**,**'Stark'**,**'d1'**,**'1 868 273-7555'**,**'#101 Velmont POS'**,**'teach25@gmail.com'**,**12000.00**,**'l3'**,**'s3'**,**'02-Sep-2011'**);**

/\*science department 2 school 3\*/

**INSERT** **INTO** TEACHERS **VALUES** **(**'t26'**,**'Lissandra'**,**'Icelady'**,**'d2'**,**'1 868 234-7654'**,**'#76 Old Road Penal'**,**'teach26@gmail.com'**,**9100.00**,**'l3'**,**'s4'**,**'09-May-2005'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t27'**,**'Zoe'**,**'John'**,**'d2'**,**'1 868 554-2634'**,**'#9 New Street Couva'**,**'teach27@gmail.com'**,**6100.00**,**'l3'**,**'s5'**,**'14-Nov-2010'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t28'**,**'Victoria'**,**'turner'**,**'d2'**,**'1 868 236-6444'**,**'#7 Rosie Hill Toco'**,**'teach28@gmail.com'**,**6700.00**,**'l3'**,**'s6'**,**'30-Oct-1998'**);**

/\*IT Department 3 School 3\*/

**INSERT** **INTO** TEACHERS **VALUES** **(**'t29'**,**'Leblanc'**,**'Devy'**,**'d3'**,**'1 868 124-2357'**,**'#98 Leblanc Drive Chagunas'**,**'teach29@gmail.com'**,**8800.00**,**'l3'**,**'s7'**,**'12-Mar-2002'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t30'**,**'Matt'**,**'Hollow'**,**'d3'**,**'1 868 324-5896'**,**'#112 Melville Debe'**,**'teach30@gmail.com'**,**8600.00**,**'l3'**,**'s8'**,**'17-Jul-2001'**);**

/\*SCHOOL 4\*/

/\*Maths Department 1 School 4\*/

**INSERT** **INTO** TEACHERS **VALUES** **(**'t31'**,**'Kindrid'**,**'Pamer'**,**'d1'**,**'1 868 947-8632'**,**'#101 Villa Road Edward Street Balmain'**,**'teach31@gmail.com'**,**5000.00**,**'l4'**,**'s1'**,**'14-Mar-2010'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t32'**,**'Baron'**,**'Nas'**,**'d1'**,**'1 868 746-3573'**,**'#23 Juke Street POS'**,**'teach31@gmail.com'**,**11000.00**,**'l4'**,**'s2'**,**'05-Sep-2011'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t33'**,**'Drogon'**,**'Snow'**,**'d1'**,**'1 868 844-9273'**,**'#83 Johnson RD San Fernando'**,**'teach33@gmail.com'**,**8200.00**,**'l4'**,**'s3'**,**'12-Mar-2009'**);**

/\*science department 2 school 4\*/

**INSERT** **INTO** TEACHERS **VALUES** **(**'t34'**,**'Matt'**,**'Anston'**,**'d2'**,**'1 868 474-9373'**,**'#12 Jackson Valley Forest Park'**,**'teach34@gmail.com'**,**6900.00**,**'l4'**,**'s5'**,**'19-May-2015'**);**

/\*IT Department 3 School 4\*/

**INSERT** **INTO** TEACHERS **VALUES** **(**'t35'**,**'Velkoz'**,**'Spacelike'**,**'d3'**,**'1 868 786-2237'**,**'#34 Sookoo Trace Claxton Bay'**,**'teach35@gmail.com'**,**9000.00**,**'l4'**,**'s8'**,**'02-Mar-2005'**);**

**INSERT** **INTO** TEACHERS **VALUES** **(**'t36'**,**'John'**,**'Cena'**,**'d3'**,**'1 868 927-5234'**,**'#98 Coders Village Chagunas'**,**'teach36@gmail.com'**,**9000.00**,**'l4'**,**'s9'**,**'27-Jul-2009'**);**

/\*INSERTING DATA INTO STUDENTS TABLE\*/

/\*students in school 1\*/

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Adrian'**,**'John'**,**'1-868-924-2342'**,**'#121 Charles Street San Fernando Trinidad'**,**'l1'**,**1**,**3.2**,**'M'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Matt'**,**'Project'**,**'1-868-234-6232'**,**'#3 Juke Street POS'**,**'l1'**,**2**,**5.2**,**'M'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Tob'**,**'Waldon'**,**'1-868-134-3244'**,**'#23 Juke Street POS'**,**'l1'**,**3**,**1.2**,**'M'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Samuel'**,**'Damion'**,**'1-868-544-9782'**,**'#1 Tom drive San Fernando'**,**'l1'**,**4**,**4.0**,**'M'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Kindrid'**,**'Howl'**,**'1-868-654-5645'**,**'#121 Charles Street San Fernando Trinidad'**,**'l1'**,**5**,**1.4**,**'M'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Dudea'**,**'Valan'**,**'1-868-345-9778'**,**'#13 Melville Debe'**,**'l1'**,**1**,**2.3**,**'M'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Drew'**,**'Chin'**,**'1-868-865-3457'**,**'#1 Tom drive San Fernando'**,**'l1'**,**2**,**3.1**,**'M'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Samuel'**,**'Persad'**,**'1-865-924-8786'**,**'#98 Leblanc Drive Chagunas'**,**'l1'**,**3**,**2.9**,**'M'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Peter'**,**'James'**,**'1-868-234-3457'**,**'#12 Charles Street Couva'**,**'l1'**,**4**,**1.7**,**'M'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Davis'**,**'Mark'**,**'1-868-345-6784'**,**'#98 Benjamin Drive Penal'**,**'l1'**,**5**,**2.4**,**'M'**);**

/\*values into school 2\*/

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Mally'**,**'Best'**,**'1-868-736-2332'**,**'#24, Alice Drive, Couva'**,**'l2'**,**1**,**1.6**,**'F'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Sally'**,**'Keet'**,**'1-868-964-9472'**,**'#12, Highland Drive, San Fernando'**,**'l2'**,**1**,**2.8**,**'F'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'kim'**,**'Salman'**,**'1-868-392-9362'**,**'#2, Highland Trace, Duncan Village'**,**'l2'**,**1**,**3.1**,**'F'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Sam'**,**'Spears'**,**'1-868-394-1722'**,**'#101, Green Lane, Debe'**,**'l2'**,**1**,**4.0**,**'F'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Brit'**,**'Mally'**,**'1-868-978-7382'**,**'#11 Charles Street San Fernando Trinidad'**,**'l2'**,**1**,**3.1**,**'F'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Jamie'**,**'Jackson'**,**'1-868-702-8372'**,**'#34, Green Lane, Debe'**,**'l2'**,**1**,**3.8**,**'F'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Syndra'**,**'Johnson'**,**'1-868-625-1982'**,**'#4, Alice Drive, Couva'**,**'l2'**,**1**,**2.5**,**'F'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Kalista'**,**'Legends'**,**'1-868-747-2222'**,**'#1, Highland Drive, San Fernando'**,**'l2'**,**1**,**1.9**,**'F'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Alicia'**,**'Denis-Nagee'**,**'1-868-736-7943'**,**'#12, Highland Trace, Duncan Village'**,**'l2'**,**1**,**2.9**,**'F'**);**

**INSERT** **INTO** STUDENTS **VALUES(**id\_count**.nextval,**'Judy'**,**'Bower'**,**'1-868-392-2748'**,**'#45, Ingot Street, Arima'**,**'l2'**,**1**,**2.3**,**'F'**);**

/\*students school 3\*/

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Aaron'**,**'Singh'**,** '657-9822'**,** '#32, Mango Trace, Toruba'**,** 'l3'**,** 1**,** 2.0**,** 'M' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Jack'**,**'Daniel'**,** '647-1622'**,** '#24, Alice Drive, Couva'**,** 'l3'**,** 2**,** 2.4**,** 'M' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Daveed'**,**'Ali'**,** '623-4972'**,** '#12, Highland Drive, San Fernando'**,** 'l3'**,** 3**,** 2.2**,** 'M' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Brandon'**,**'John'**,** '654-1662'**,** '#2, Ingot Street, Arima'**,** 'l3'**,** 4**,** 2.7**,** 'M' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Steve'**,**'Carl'**,** '665-1548'**,** '#4, Alfred Road, Marabella'**,** 'l3'**,** 5**,** 3.0**,** 'M' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Jenny'**,**'Alves'**,** '643-4722'**,** '#12, Denial Lane, Couva'**,** 'l3'**,** 2**,** 2.1**,** 'F' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Saphana'**,**'Ali'**,** '624-3658'**,** '#12, Highland Trace, Duncan Village'**,** 'l3'**,** 3**,** 2.23**,** 'F' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Bella'**,**'Deane'**,** '625-8862'**,** '#22, Apple Street, Prince Town'**,** 'l3'**,** 4**,** 2.9**,** 'F' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Sally'**,**'Lorenzo'**,** '669-5874'**,** '#44, Green Lane, Debe'**,** 'l3'**,** 5**,** 3.1**,** 'F' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Tiana'**,**'Forte'**,** '677-6674'**,** '#7, River Road, San Fernando'**,** 'l3'**,** 5**,** 3.1**,** 'F' **);**

/\*students in school 4\*/

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Kevin'**,**'Scott'**,** '657-2525'**,** '#241, Alvion Alley, POS'**,** 'l4'**,** 2**,** 1.9**,** 'M' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Daniel'**,**'Narine'**,** '644-3651'**,** '#71, Lowland Drive, San Fernando'**,** 'l4'**,** 3**,** 2.1**,** 'M' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Steven'**,**'Harris'**,** '628-4875'**,** '#29, Steel Street, Gasparillo'**,** 'l4'**,** 4**,** 3.2**,** 'M' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Garen'**,**'Bush'**,** '632-5474'**,** '#11, Diamond Road, Marabella'**,** 'l4'**,** 5**,** 2.0**,** 'M' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Levi'**,**'Crawford'**,** '644-6958'**,** '#41, Toad Village, Arima'**,** 'l4'**,** 1**,** 2.5**,** 'M' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Jennifer'**,**'Carlton'**,** '647-4362'**,** '#13, Happy Lane, Princes Town'**,** 'l4'**,** 2**,** 2.4**,** 'F' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Penny'**,**'Walcott'**,** '658-7858'**,** '#12, Highland Trace, Point Fortin'**,** 'l4'**,** 3**,** 2.21**,** 'F' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Katarina'**,**'Dianne'**,** '6278-1562'**,** '#22, Singh Street, La Brea'**,** 'l4'**,** 4**,** 2.91**,** 'F' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Diana'**,**'Larry'**,** '669-4774'**,** '#44, Plaza Lane, Moruga'**,** 'l4'**,** 5**,** 3.08**,** 'F' **);**

**INSERT** **INTO** students **VALUES** **(**id\_count**.NEXTVAL,** 'Sona'**,**'Farali'**,** '678-4174'**,** '#7, Water Road, Marabella'**,** 'l4'**,** 1**,** 2.48**,** 'F' **);**

/\*INSERTING DATA INTO CLASSES TABLE \*/

/\*list of CLASSES in school 1\*/

**INSERT** **INTO** CLASSES **VALUES** **(**'LOC1\_CLA1'**,**'s2'**,**'t3'**,**'Saturday 10:00 '**);**

**INSERT** **INTO** CLASSES **VALUES** **(**'LOC1\_CLA2'**,**'s6'**,**'t8'**,**'Thursday 11:00 '**);**

**INSERT** **INTO** CLASSES **VALUES** **(**'LOC1\_CLA3'**,**'s1'**,**'t1'**,**'Friday 2:00 '**);**

/\*list of CLASSES in school 2\*/

**INSERT** **INTO** CLASSES **VALUES** **(**'LOC2\_CLA1'**,**'s4'**,**'t16'**,**'Wednesday 8:00 '**);**

**INSERT** **INTO** CLASSES **VALUES** **(**'LOC2\_CLA2'**,**'s9'**,**'t22'**,**'Friday 4:00 '**);**

**INSERT** **INTO** CLASSES **VALUES** **(**'LOC2\_CLA3'**,**'s5'**,**'t17'**,**'Saturday 12:00 '**);**

/\*list of CLASSES in school 3\*/

**INSERT** **INTO** CLASSES **VALUES(**'LOC3\_CLA1'**,**'s8'**,**'t30'**,**'Tuesday 9:00'**);**

**INSERT** **INTO** CLASSES **VALUES(**'LOC3\_CLA2'**,**'s4'**,**'t26'**,**'Wednesday 9:00' **);**

**INSERT** **INTO** CLASSES **VALUES** **(**'LOC3\_CLA3'**,**'s7'**,**'t10'**,**'Sunday 12:00'**);**

/\*list of CLASSES in school 4\*/

**INSERT** **INTO** CLASSES **VALUES(**'LOC4\_CLA1'**,**'s2'**,**'t32'**,**'Monday 9:00' **);**

**INSERT** **INTO** CLASSES **VALUES(**'LOC4\_CLA2'**,**'s3'**,**'t33'**,**'Tuesday 9:00' **);**

**INSERT** **INTO** CLASSES **VALUES(**'LOC4\_CLA3'**,**'s9'**,**'t36'**,**'Wednesday 9:00' **);**

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/\*INSERTING DATA INTO ENROLLMENTS TABLE\*/

/\*Enrollment of CLASSES from school 1\*/

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA1'**,**1030**,**92.5**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA1'**,**1080**,**70.9**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA1'**,**1100**,**85.2**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA1'**,**1120**,**50.0**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA1'**,**1160**,**77.8**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA2'**,**1080**,**92.9**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA2'**,**1050**,**90.9**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA2'**,**1030**,**100.6**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA2'**,**1100**,**89.1**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA2'**,**1120**,**98.2**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA3'**,**1050**,**62.3**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA3'**,**1110**,**49.9**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA3'**,**1160**,**78.0**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA3'**,**1090**,**66.1**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC1\_CLA3'**,**1030**,**59.5**);**

/\*enrollments of classes in school 2\*/

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA1'**,**1220**,**42.5**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA1'**,**1230**,**72.2**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA1'**,**1240**,**82.1**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA1'**,**1250**,**100.0**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA1'**,**1260**,**93.1**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA2'**,**1260**,**69.5**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA2'**,**1250**,**76.0**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA2'**,**1290**,**82.1**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA2'**,**1220**,**56.2**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA2'**,**1300**,**90.3**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA3'**,**1330**,**89.5**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA3'**,**1320**,**70.9**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA3'**,**1260**,**88.8**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA3'**,**1300**,**98.1**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC2\_CLA3'**,**1230**,**78.2**);**

/\*enrollments for location 3\*/

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA1'**,**1050**,**82.5**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA1'**,**1040**,**70.9**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA1'**,**1060**,**70.2**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA1'**,**1180**,**60.0**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA1'**,**1170**,**72.8**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA2'**,**1360**,**92.4**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA2'**,**1390**,**88.3**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA2'**,**1340**,**75.5**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA2'**,**1410**,**90.0**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA2'**,**1420**,**82.5**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA3'**,**1360**,**62.4**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA3'**,**1390**,**78.2**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA3'**,**1340**,**95.3**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA3'**,**1410**,**98.4**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC3\_CLA3'**,**1420**,**98.1**);**

/\*enrollments for location 4\*/

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA1'**,**1400**,**75.1**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA1'**,**1430**,**85.0**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA1'**,**1420**,**62.3**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA1'**,**1350**,**50.5**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA1'**,**1370**,**73.7**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA2'**,**1430**,**84.6**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA2'**,**1410**,**89.4**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA2'**,**1360**,**94.2**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA2'**,**1390**,**90.1**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA2'**,**1370**,**71.4**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA3'**,**1070**,**65.7**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA3'**,**1170**,**69.4**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA3'**,**1200**,**78.4**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA3'**,**1190**,**70.5**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA3'**,**1400**,**88.4**);**

**INSERT** **INTO** ENROLLMENTS **VALUES(**'LOC4\_CLA3'**,**1430**,**99.4**);**

# TABLE DEFINATIONS AFTER CREATION

