|  |
| --- |
| Close-up image showing the leaf-sides of two oversized books side-by-side on a bookshelf, with additional books in soft focus background |
| VITABU MTAANI PROJECT  Vitabu Mtaani is a project aimed at increasing the reading culture among the youths in Kiambu County. Mobile libraries will be deployed at various wards making books and other educational resources more accessible. |
| |  |  |  | | --- | --- | --- | | Mercy Ogero |  | 7/1/24 | |

# **VITABU MTAANI PROJECT**

## **INTRODUCTION**

### Defining the Problem

Vitabu Mtaani is an initiative to foster and develop a reading culture among the youths in Kiambu. The project aims at creating mobile libraries that will travel to various wards giving access to educational materials and resources. The following are the reasons that have prompted the Vitabu Mtaani initiative.

* Lack of access to library facilities in the many wards in Kiambu.
* Lack of updated materials on various topics that the youths can read.
* Less several quality reading materials in some wards.
* Lack of efficient supply and stocking of mobile libraries with the needed books.
* Youths are idle – idle minds are the devil’s workshop.
* Literacy levels are dropping due to lacking books and reading materials.
* Lack of a reading culture among the youths.
* Existing libraries are analog in a mostly digital world.

### Defining the Solution

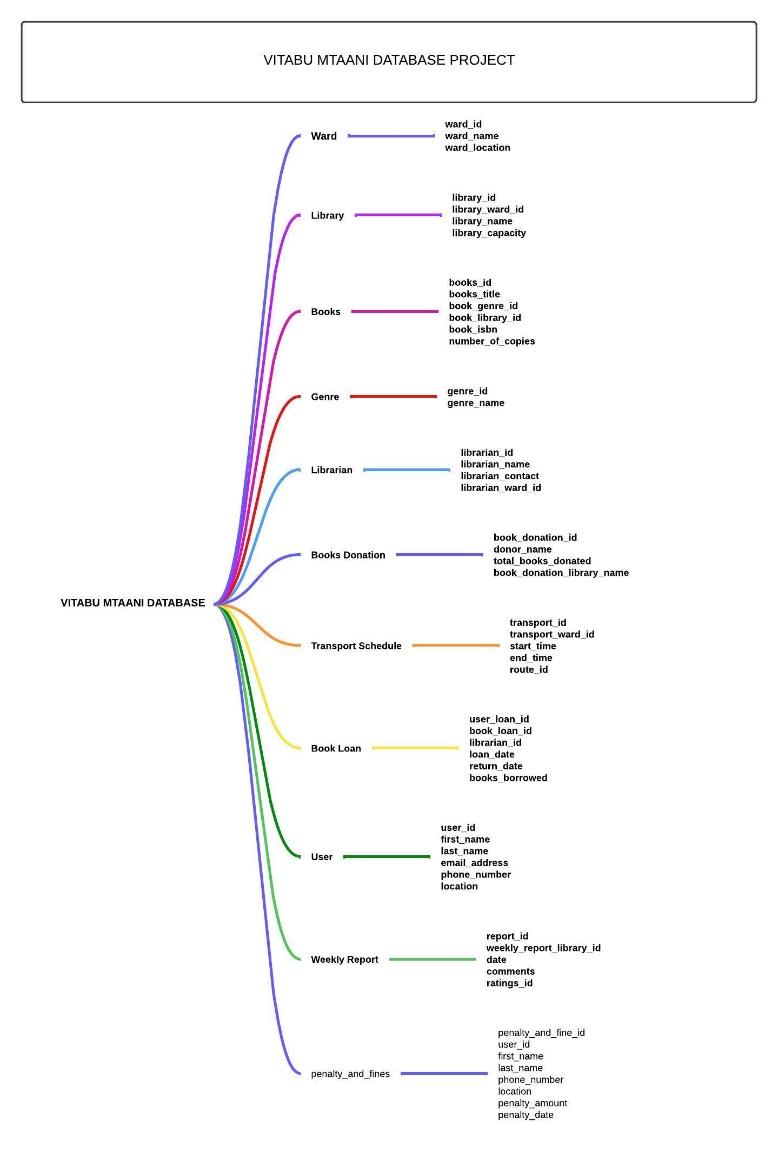
The solution to the abovementioned problems will be deploying mobile library units across the county. The mobile libraries are managed and monitored to ensure they serve the community with maximum capacity. The following are the solutions that will be implemented:

* Deploying mobile library units to the wards in Kiambu.
* Stocking the mobile library units with quality reading materials of different genres.
* Tracking the stocking of mobile libraries with effective logistics and inventory management.
* Opportunity to increase human potential by eliminating idleness and encouraging industriousness amongst our youth.
* Increase literacy levels beyond formal learning institutions
* Inspire a reading culture within our communities, because readers are leaders.
* Leverage the increase in use of technology by the youth in Kenya by making libraries easy to access and manage.

## **THE CONCEPT (Conceptual Modeling)**

The following is the conceptual model for the Vitabu Mtaani project

* Library in every ward
* Books in every library
* Books will be of different genres
* Librarians to manage the mobile library
* Book loan information for every mobile library data
* Book donation data of every mobile library data
* Transport schedule of each mobile library
* Information on users
* Weekly report on the progress of each mobile library
* Penalties and Fines for users who misplace or overstay with the books



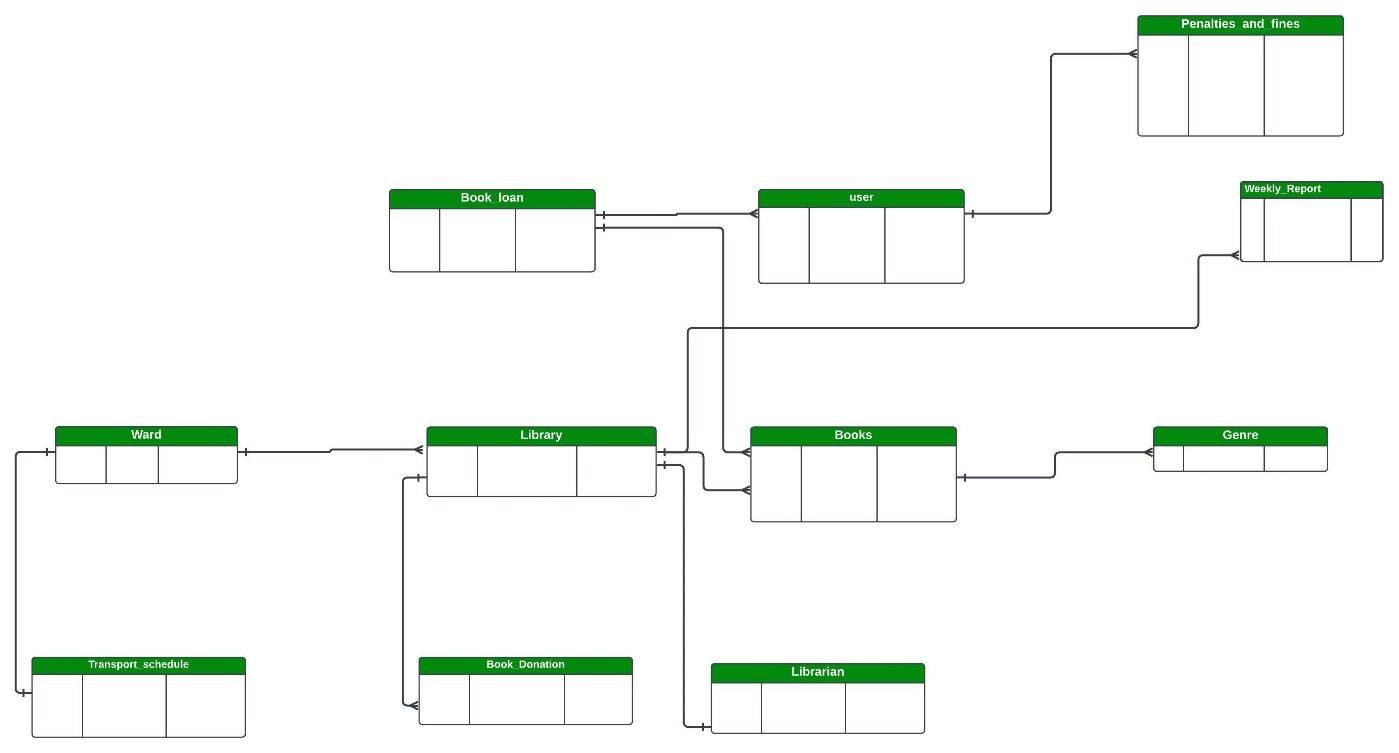
**Processes**

**Step 1: Identifying the Entities**

* Ward
* Library
* Books
* Genre
* Librarian
* Book Donations
* Transport Schedule
* Book Loan
* User
* Weekly Reports
* Penalties and Fines

**Step 2: Identifying Connections within Entities**

* Each ward will have a single mobile library unit
* Each library has several books
* Each book has a specific genre and the books are of different genres
* One librarian will manage each single mobile library unit
* A weekly report would be generated of every mobile library unit
* Each mobile library unit will have its book loan data
* Each mobile library unit will have its book donation data
* Each user will have his or her holding information if he borrowed a book
* Each mobile library unit will have its transport schedule
* Any user who has overstayed or lost a book will be charged a penalty or a fine



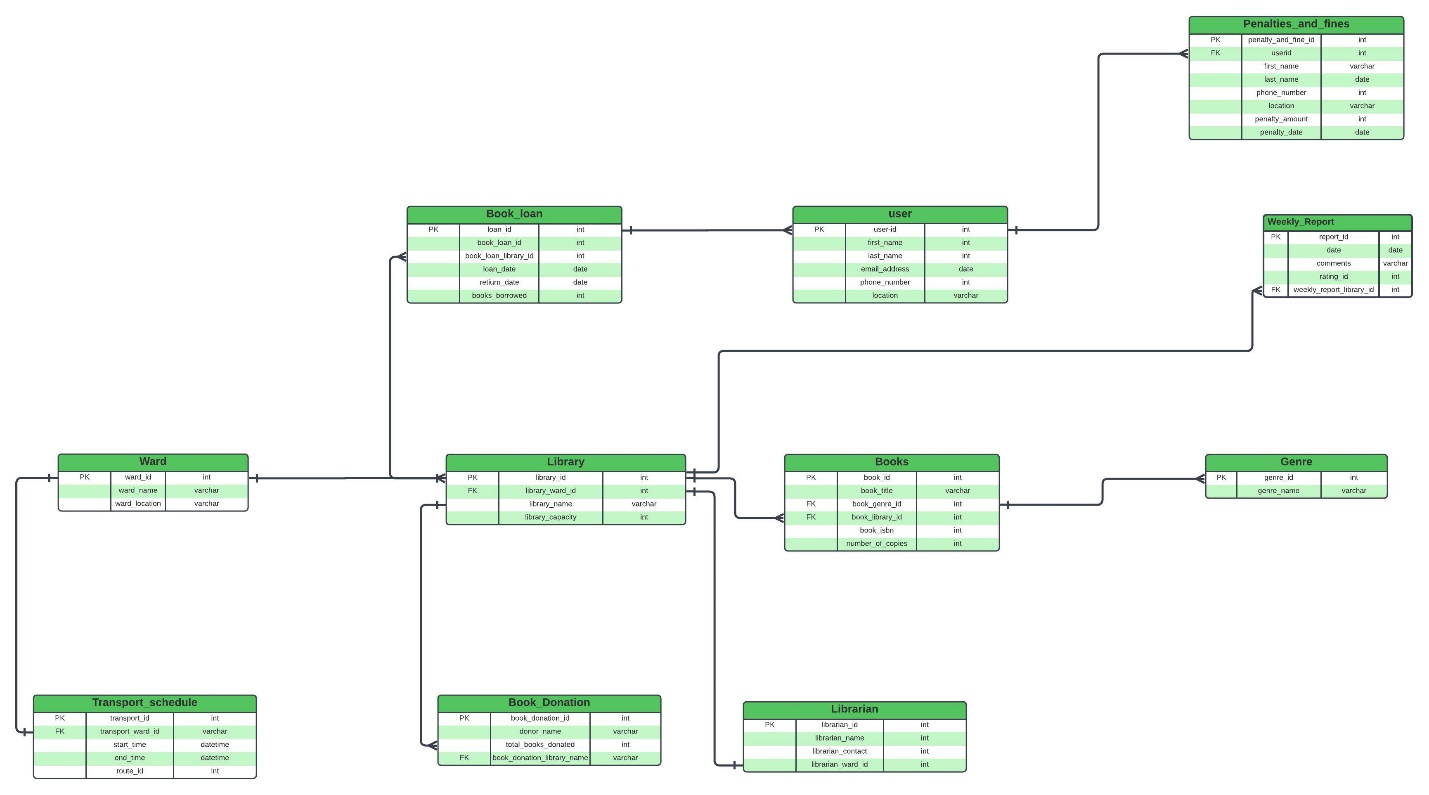
## LOGICAL MODEL

The logical model will involve identifying the entity attributes.

|  |  |
| --- | --- |
| Entity | Attributes |
| ward | ward\_id  ward\_name  ward\_location |
| library | library\_id  library\_ward\_id  library\_name  library\_capacity |
| books | books\_id  books\_title  book\_genre\_id  book\_library\_id  book\_isbn  number\_of\_copies |
| genre | genre\_id  genre\_name |
| librarian | librarian\_id  librarian\_name  librarian\_contact  librarian\_ward\_id |
| books\_donation | book\_donation\_id  donor\_name  total\_books\_donated  book\_donation\_library\_name |
| transport\_schedule | transport\_id  transport\_ward\_id  start\_time  end\_time  route\_id |
| book\_loan | user\_loan\_id  book\_loan\_id  librarian\_id  loan\_date  return\_date  books\_borrowed |
| user | user\_id  first\_name  last\_name  email\_address  phone\_number\_location |
| weekly\_report | report\_id  weekly\_report\_library\_id  date  comments  ratings\_id |
| penalty\_and\_fines | penalty\_and\_fine\_id  user\_id  first\_name  last\_name  phone\_number  location  penalty\_amount  penalty\_date |

## **PHYSICAL MODEL**

This step involves deciding the attribute’s specific data types.



--1. Creating under vitabu\_mtaani\_db

--Wards (ward\_id, ward\_name, ward\_location)

**CREATE** **TABLE** **IF** **NOT** **EXISTS** wards(

ward\_id INTERGER **PRIMARY** **KEY**

ward\_name **VARCHAR**(50) **UNIQUE**,

ward\_location **VARCHAR**(50));

--2. Creating under vitabu\_mtaani\_db

--library (librarian\_id, library\_ward\_id, library\_name, librarian\_capacity)

**CREATE** **TABLE** **IF** **NOT** **EXISTS** library(

library\_id **INT** **PRIMARY** **KEY**,

library\_ward\_id INTERGER **NOT** **NULL**,

library\_name **VARCHAR** (10),

library\_capacity);

--3. Creating under vitabu\_mtaani\_db

--books (book\_id, book\_title, book\_genre\_id, book\_library\_id,book\_isbn, number\_of\_copies)

**CREATE** **TABLE** **IF** **NOT** **EXISTS** books(

book\_id INTERGER **PRIMARY** **KEY**,

book\_title **VARCHAR** (50) **NOT** **NULL**,

book\_genre\_id INTERGER,

book\_library\_id INTERGER,

book\_isbn INTERGER,

number\_of\_copies INTERGER

);

--4. Creating under vitabu\_mtaani\_db

--genre (genre\_id, genre\_name)

**CREATE** **TABLE** **IF** **NOT** **EXISTS** genre(

genre\_id INTERGER **PRIMARY** **KEY**,

genre\_name **VARCHAR**(20)

);

--5. Creating under vitabu\_mtaani\_db

--librarian (librarian\_id, librarian\_name, librarian\_contact, librarian\_ward\_id)

**CREATE** **TABLE** **IF** **NOT** **EXISTS** librarian(

librarian\_id INTERGER **PRIMARY** **KEY**,

librarian\_name **VARCHAR** (20) **NOT** **NULL**,

librarian\_contact INTERGER,

librarian\_ward\_id);

--6. Creating under the vitabu\_mtaani\_db

-- books\_donation table (book\_donation\_id, donor\_name, total\_books\_donated,book\_donation\_library\_name)

**CREATE** **TABLE** **IF** **NOT** **EXISTS** books\_donation (

book\_donation\_id INTERGER **NOT** **NULL**,

donor\_name **VARCHAR**(20),

total\_books\_donated **INT**,

book\_donation\_library\_name **VARCHAR**(20)

);

--7. Creating under the vitabu\_mtaani\_db

-- transport\_schedule table (transport\_id, transport\_ward\_id, start\_time,end\_time, route\_id)

**CREATE** **TABLE** **IF** **NOT** **EXISTS** books\_donation (

transport\_id INTERGER **NOT** **NULL**,

transport\_ward\_id INTERGER,

start\_time DATETIME,

end\_time DATETIME,

route\_id INTERGER

);

--8. Creating under the vitabu\_mtaani\_db

--book\_loan (user\_loan\_id, book\_loan\_id, librarian\_id, loan\_date, return\_date, books\_borrowed)

**CREATE** **TABLE** **IF** **NOT** **EXISTS** book\_loan(

user\_loan\_id INTERGER **PRIMARY** **KEY**,

book\_loan\_id INTERGER **NOT** **NULL**,

librarian\_id INTERGER,

loan\_date DATETIME,

return\_date DATETIME,

books\_borrowed INTERGER

);

--9. Creating under the vitabu\_mtaani\_db

--transport\_schedule (transport\_id, transport\_ward\_id, start\_time, end\_time, route\_id)

**CREATE** **TABLE** **IF** **NOT** **EXISTS** transport\_schedule(

transport\_id **INT** **PRIMARY** **KEY**,

transport\_ward\_id INTERGER,

start\_time **TIME**,

end\_time **TIME**,

route\_id INTERGER

);

--10. Creating under the vitabu\_mtaani\_db

--user (user\_id, first\_name, last\_name, email\_address, phone\_number)

**CREATE** **TABLE** **IF** **NOT** **EXISTS** **user**(

user\_id INTERGER **PRIMARY** **KEY**,

first\_name **VARCHAR**(50) **NOT** **NULL**,

last\_name **VARCHAR**(50),

email\_address **VARCHAR**(20),

phone\_number INTERGER

);

-- 11. Creating under the vitabu\_mtaani\_db

--weekly\_report ( report\_id, weekly\_report\_library\_id, date, comments, ratings\_id)

**CREATE** **TABLE** **IF** **NOT** **EXISTS** weekly\_report(

report\_id INTERGER **PRIMARY** **KEY**,

weekly\_report\_library\_id INTERGER,

**date** **DATE** **NOT** **NULL**,

comments TEXT,

ratings\_id **INT**

);

-- 12. Creating under the vitabu\_mtaani\_db

--penalty\_and\_fine ( user\_id, first\_name, last\_name, phone\_number, location, penalty\_amount, penalty\_date)

**CREATE** **TABLE** **IF** **NOT** **EXISTS** penalty\_and\_fine(

user\_id **INT** **PRIMARY** **KEY**,

first\_name **VARCHAR**(20),

last\_name **VARCHAR** (20),

phone\_number INTERGER,

location **VARCHAR**(30),

penalty\_amount INTERGER,

penalty\_date **DATE**

);

--Inserting records to wards table

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(1,**'Githobokoni Library'**, **'Gatundu North'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(2,**'Gituamba Library'**, **'Gatundu North'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(3,**'Chania'**, **'Gatundu North'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(4,**'Mangu'**, **'Gatundu North'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(5,**'Kiamwangi'**, **'Gatundu South'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(6,**'Kiganjo'**, **'Gatundu South'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(7,**'Nadarugu'**, **'Gatundu South'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(8,**'Ngenda'**, **'Gatundu South'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(9,**'Murera'**, **'Juja'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(10,**'Theta'**, **'Juja'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(11,**'Juja'**, **'Juja'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(12,**'Witeithie'**, **'Juja'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(13,**'Kalimoni'**, **'Juja'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(14,**'Township'**, **'Thika Town'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(15,**'Kamenu'**, **'Thika Town'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(16,**'Hospital'**, **'Thika Town'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(17,**'Gatuanyaga'**, **'Thika Town'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(18,**'Ngoliba'**, **'Thika Town'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(19,**'Githothua'**, **'Ruiru'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(20,**'Biashara'**, **'Ruiru'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(21,**'Gatongora'**, **'Ruiru'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(22,**'Kahawa Wendani'**, **'Ruiru'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(23,**'Kiuu'**, **'Ruiru'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(24,**'Mwiki'**, **'Ruiru'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(25,**'Mwihoko'**, **'Ruiru'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(26,**'Githunguri'**, **'Githunguri'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(27,**'Githiga'**, **'Githunguri'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(28,**'IKinu'**, **'Githunguri'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(29,**'Ngewa'**, **'Githunguri'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(30,**'Komothai'**, **'Githunguri'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(31,**'Ting’ang’a'**, **'Kiambu'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(32,**'Ndumberi'**, **'Kiambu'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(33,**'Riabai'**, **'Kiambu'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(34,**'Township'**, **'Kiambu'**);

**INSERT** **INTO** wards (ward\_id, ward\_name, ward\_location)

**VALUES**

(35,**'Cianda'**, **'Kiambaa'**);

**SELECT** \* **FROM** wards *w* ;

--Inserting records into the library table

**INSERT** **INTO** library (library\_id, library\_ward\_id, library\_name, library\_capacity)

**VALUES**

(1, 1, **'Githobokoni Library'**, 22),

(2, 2, **'Gituamba Library'**, 14),

(3, 3, **'Chania Library'**, 35),

(4, 4, **'Mangu Library'**, 33),

(5, 5, **'Kiamwangi Library'**, 16),

(6, 6, **'Kiganjo Library'**, 10),

(7, 7, **'Nadarugu Library'**, 22),

(8, 8, **'Ngenda Library'**, 35),

(9, 9, **'Murera Library'**, 30),

(10, 10, **'Theta Library'**, 33),

(11, 11, **'Juja Library'**, 33),

(12, 12, **'Witeithie Library'**, 34),

(13, 13, **'Kalimoni Library'**, 27),

(14, 14, **'Township Library'**, 11),

(15, 15, **'Kamenu Library'**, 22),

(16, 16, **'Hospital Library'**, 27),

(17, 17, **'Gatuanyaga Library'**, 20),

(18, 18, **'Ngoliba Library'**, 16),

(19, 19, **'Githothua Library'**, 18),

(20, 20, **'Biashara Library'**, 26),

(21, 21, **'Gatongora Library'**, 12),

(22, 22, **'Kahawa Wendani Library'**, 33),

(23, 23, **'Kiuu Library'**, 21),

(24, 24, **'Mwiki Library'**, 22),

(25, 25, **'Mwihoko Library'**, 15),

(26, 26, **'Githunguri Library'**, 18),

(27, 27, **'Githiga Library'**, 18),

(28, 28, **'IKinu Library'**, 33),

(29, 29, **'Ngewa Library'**, 25),

(30, 30, **'Komothai Library'**, 18),

(31, 31, **'Ting’ang’a Library'**, 15),

(32, 32, **'Ndumberi Library'**, 24),

(33, 33, **'Riabai Library'**, 18),

(34, 34, **'Township Library'**, 20),

(35, 35, **'Cianda Library'**, 35);

**SELECT** \* **FROM** library *l* ;

**ALTER** **TABLE** books

**ADD** **COLUMN** book\_isbn **INTEGER**;

**ALTER** **TABLE** books

**ADD** **COLUMN** number\_of\_books;

-- Inserting records into the books table

**INSERT** **INTO** books (book\_id, book\_title, book\_genre\_id, book\_library\_id, book\_isbn, number\_of\_books)

**VALUES**

(1, **'Facing Mount Kenya'**, 1, 1, 10001, 5),

(2, **'The River and the Source'**, 1, 2, 10002, 3),

(3, **'Mstahiki Meya'**, 1, 3, 10003, 7),

(4, **'Kigogo'**, 1, 4, 10004, 2),

(5, **'The Oggre and the Girl'**, 1, 5, 10005, 4),

(6, **'Differential Calculus'**, 2, 6, 10006, 6),

(7, **'Ordinary Differential Equations'**, 2, 7, 10007, 5),

(8, **'Design and Analysis of Experiments'**, 2, 8, 10008, 3),

(9, **'Applied Economics'**, 3, 9, 10009, 7),

(10, **'Kenyan Economics'**, 3, 10, 10010, 2),

(11, **'IMF and the WorldBank'**, 3, 11, 10011, 4),

(12, **'Formation of Rocks'**, 4, 12, 10012, 6),

(13, **'Clean Code'**, 5, 13, 10013, 5),

(14, **'Coders at Work'**, 5, 14, 10014, 3),

(15, **'Structures and Algorithms'**, 5, 15, 10015, 7),

(16, **'Introduction to C++'**, 5, 16, 10016, 2),

(17, **'The Guns of August'**, 6, 17, 10017, 4),

(18, **'The Proud Tower'**, 6, 18, 10018, 6),

(19, **'Testament of the Youth'**, 6, 19, 10019, 5),

(20, **'The First World War'**, 6, 20, 10020, 3),

(21, **'The Second World War'**, 6, 21, 10021, 7),

(22, **'Wuthering Heights'**, 7, 22, 10022, 2),

(23, **'To Kill a Mockingbird'**, 7, 23, 10023, 4),

(24, **'Middlemarch'**, 7, 24, 10024, 6),

(25, **'A Doll’s House'**, 7, 25, 10025, 5),

(26, **'The Bell Jar'**, 7, 26, 10026, 3),

(27, **'The World Religions'**, 8, 27, 10027, 7),

(28, **'The Great Controversy'**, 8, 28, 10028, 2),

(29, **'Adventist Home'**, 8, 29, 10029, 4),

(30, **'Last Day Events'**, 8, 30, 10030, 6),

(31, **'How to Lie With Maps'**, 9, 31, 10031, 5),

(32, **'The Revenge of Geography'**, 9, 32, 10032, 3),

(33, **'Physical Geography'**, 9, 33, 10033, 5);

**SELECT** \* **FROM** books *b* ;

-- Inserting records into the genre table

**INSERT** **INTO** genre (genre\_id, genre\_name)

**VALUES**

(1, **'Literature'**),

(2, **'mathematics'**),

(3, **'Economics and Business'**),

(4, **'Geography'**),

(5, **'Coding'**),

(6, **'History'**),

(7, **'Fiction'**),

(8, **'Religion'**),

(9, **'Physical Geography'**);

**SELECT** \* **FROM** genre *g* ;

--Inserting records into the librarian table

**INSERT** **INTO** librarian (librarian\_id, librarian\_name, librarian\_contact, librarian\_ward\_id)

**VALUES**

(1, **'Mercy'**, 7204766, 1),

(2, **'Nyamoita'**, 7339626, 2),

(3, **'Ogero'**, 7759360, 3),

(4, **'Bochaberi'**, 7513807, 4),

(5, **'Ombori'**, 7742616, 5),

(6, **'Tersae'**, 7927779, 6),

(7, **'Kemuntor'**, 7513953, 7),

(8, **'Ogreho'**, 7676761, 8),

(9, **'Ivy'**, 7245284, 9),

(10, **'Mark'**, 7300502, 10),

(11, **'Masara'**, 7859398, 11),

(12, **'Ogerohk'**, 7961875, 12),

(13, **'Justine'**, 7744599, 13),

(14, **'Noah'**, 7924932, 14),

(15, **'Olivia'**, 7542787, 15),

(16, **'Paul'**, 7696923, 16),

(17, **'John'**, 7368993, 17),

(18, **'Rachel'**, 7787823, 18),

(19, **'Samuel'**, 7330556, 19),

(20, **'Tina'**, 7585310, 20),

(21, **'Victor'**, 7399459, 21),

(22, **'Wendy'**, 7907058, 22),

(23, **'Menyd Maitah'**, 7100948, 23),

(24, **'Yvonne'**, 7499179, 24),

(25, **'Zachary'**, 7566256, 25),

(26, **'Isabella'**, 7870831, 26),

(27, **'Ethan Garcia'**, 7857249, 27),

(28, **'Sophia'**, 7411628, 28),

(29, **'Jayons'**, 7737190, 29),

(30, **'Ruto'**, 7435445, 30),

(31, **'Kipeklleoni'**, 7635127, 31),

(32, **'Miary'**, 7273987, 32),

(33, **'Jackson'**, 7935421, 33),

(34, **'Emily'**, 7174506, 34),

(35, **'Kenyan'**, 7773399, 35);

**SELECT** \* **FROM** librarian *l* ;

-- Inserting records into the books\_donation table

**INSERT** **INTO** books\_donation (book\_donation\_id, donor\_name, total\_books\_donated, book\_donation\_library\_name)

**VALUES**

(1, **'Brianna'**, 7, **'Githobokoni Library'**),

(2, **'Talisha'**, 8, **'Gituamba Library'**),

(3, **'Sironet'**, 13, **'Chania Library'**),

(4, **'lehsan'**, 6, **'Mangu Library'**),

(5, **'Genesis'**, 18, **'Kiamwangi Library'**),

(6, **'Exidus'**, 12, **'Kiganjo Library'**),

(7, **'Leviticus'**, 15, **'Nadarugu Library'**),

(8, **'Deutronomy'**, 2, **'Ngenda Library'**),

(9, **'Teresa'**, 9, **'Murera Library'**),

(10, **'Mary'**, 5, **'Theta Library'**),

(11, **'Jospeh'**, 14, **'Juja Library'**),

(12, **'Absalpm'**, 4, **'Witeithie Library'**),

(13, **'David'**, 7, **'Kalimoni Library'**),

(14, **'Kendi'**, 12, **'Township Library'**),

(15, **'Mark'**, 4, **'Kamenu Library'**),

(16, **'Peter'**, 1, **'Hospital Library'**),

(17, **'Donn'**, 10, **'Gatuanyaga Library'**),

(18, **'Kenyatta'**, 9, **'Ngoliba Library'**),

(19, **'Wainaina'**, 19, **'Githothua Library'**),

(20, **'Racheal'**, 3, **'Biashara Library'**),

(21, **'Kwamboka'**, 11, **'Gatongora Library'**),

(22, **'Oger0'**, 18, **'Kahawa Wendani Library'**),

(23, **'Pharmius'**, 8, **'Kiuu Library'**),

(24, **'Helsinki'**, 17, **'Mwiki Library'**),

(25, **'Davy'**, 9, **'Mwihoko Library'**),

(26, **'Solomon'**, 10, **'Githunguri Library'**),

(27, **'Esther'**, 5, **'Githiga Library'**),

(28, **'Nehemia'**, 13, **'IKinu Library'**),

(29, **'Zechariah'**, 1, **'Ngewa Library'**),

(30, **'Malachi'**, 7, **'Komothai Library'**),

(31, **'Mathew'**, 62, **'Ting’ang’a Library'**),

(32, **'Mathia'**, 18, **'Ndumberi Library'**),

(33, **'Jerry'**, 10, **'Riabai Library'**),

(34, **'Papa'**, 4, **'Township Library'**),

(35, **'Waina'**, 13, **'Cianda Library'**);

**SELECT** \* **FROM** books\_donation *bd* ;

-- Inserting records into the book\_loan table

**INSERT** **INTO** book\_loan (user\_loan\_id, book\_loan\_id, librarian\_id, loan\_date, return\_date, books\_borrowed)

**VALUES**

(1, 1, 1, **'2023-01-01 10:00:02'**, **'2023-01-15 10:00:11'**, 3),

(2, 2, 2, **'2023-01-02 11:30:31'**, **'2023-01-16 11:30:00'**, 5),

(3, 3, 3, **'2023-01-03 09:45:52'**, **'2023-01-17 09:45:23'**, 2),

(4, 4, 4, **'2023-02-04 14:20:12'**, **'2023-02-18 14:20:43'**, 4),

(5, 5, 5, **'2023-02-05 16:00:54'**, **'2023-02-19 16:00:23'**, 1),

(6, 6, 6, **'2023-02-06 08:00:53'**, **'2023-02-20 08:00:43'**, 1),

(7, 7, 7, **'2023-02-07 12:00:30'**, **'2023-02-21 12:00:12'**, 3),

(8, 8, 8, **'2023-03-08 14:30:12'**, **'2023-03-22 14:30:13'**, 1),

(9, 9, 9, **'2023-03-09 10:45:32'**, **'2023-03-23 10:45:32'**, 5),

(10, 10, 10, **'2023-04-10 11:15:23'**, **'2023-04-24 11:15:32'**, 1),

(11, 11, 11, **'2023-04-11 13:20:14'**, **'2023-04-25 13:20:43'**, 2),

(12, 12, 12, **'2023-04-12 15:30:54'**, **'2023-04-26 15:30:32'**, 3),

(13, 13, 13, **'2023-05-13 17:00:23'**, **'2023-05-27 17:00:21'**, 4),

(14, 14, 14, **'2023-05-14 09:00:12'**, **'2023-05-28 09:00:12'**, 5),

(15, 15, 15, **'2023-05-15 10:30:13'**, **'2023-05-29 10:30:13'**, 2),

(16, 16, 16, **'2023-05-116 12:45:23'**, **'2023-06-30 14:16:14'**,1),

(17, 17, 17, **'2023-06-17 14:15:23'**, **'2023-07-31 14:15:14'**, 1),

(18, 18, 18, **'2023-06-18 16:00:43'**, **'2023-08-01 16:00:15'**, 5),

(19, 19, 19, **'2023-07-19 09:30:12'**, **'2023-08-02 09:30:42'**, 2),

(20, 20, 20, **'2023-07-20 11:00:13'**, **'2023-08-03 11:00:32'**, 3),

(21, 21, 21, **'2023-07-21 13:20:43'**, **'2023-08-04 13:20:32'**, 4),

(22, 22, 22, **'2023-08-22 15:45:32'**, **'2023-09-05 15:45:53'**, 5),

(23, 23, 23, **'2023-08-23 17:30:12'**, **'2023-09-06 17:30:52'**, 1),

(24, 24, 24, **'2023-08-24 10:00:43'**, **'2023-09-07 10:00:15'**, 3),

(25, 25, 25, **'2023-09-24 10:00:43'**, **'2023-10-08 12:15:16'**, 2),

(26, 26, 26, **'2023-09-26 14:30:22'**, **'2023-10-09 14:30:17'**, 3),

(27, 27, 27, **'2023-09-27 16:45:13'**, **'2023-10-10 16:45:42'**, 2),

(28, 28, 28, **'2023-09-28 09:00:43'**, **'2023-10-11 09:00:24'**, 4),

(29, 29, 29, **'2023-09-29 11:30:23'**, **'2023-10-12 11:30:52'**, 2),

(30, 30, 30, **'2023-10-30 13:00:54'**, **'2023-11-13 13:00:13'**, 5),

(31, 31, 31, **'2023-10-31 15:20:54'**, **'2023-11-14 15:20:13'**, 3),

(32, 32, 32, **'2023-10-01 17:00:12'**, **'2023-11-15 17:00:53'**, 2),

(33, 33, 33, **'2023-10-02 10:30:12'**, **'2023-11-16 10:30:53'**, 1),

(34, 34, 34, **'2023-11-03 12:45:15'**, **'2024-08-17 12:45:23'**, 5),

(35, 35, 35, **'2023-12-04 14:15:15'**, **'2024-08-18 14:15:23'**, 1);

**SELECT** \* **FROM** book\_loan bl ;

-- Insert records into the transport\_schedule table

**INSERT** **INTO** transport\_schedule (transport\_id, transport\_ward\_id, start\_time, end\_time, route\_id)

**VALUES**

(1, 1, **'08:00:00'**, **'17:00:00'**, 1),

(2, 2, **'08:00:00'**, **'17:00:00'**, 2),

(3, 3, **'08:00:00'**, **'17:00:00'**, 3),

(4, 4, **'08:00:00'**, **'17:00:00'**, 4),

(5, 5, **'08:00:00'**, **'17:00:00'**, 5),

(6, 6, **'08:00:00'**, **'17:00:00'**, 6),

(7, 7, **'08:00:00'**, **'17:00:00'**, 7),

(8, 8, **'08:00:00'**, **'17:00:00'**, 8),

(9, 9, **'08:00:00'**, **'17:00:00'**, 9),

(10, 10, **'08:00:00'**, **'17:00:00'**, 10),

(11, 11, **'08:00:00'**, **'17:00:00'**, 11),

(12, 12, **'08:00:00'**, **'17:00:00'**, 12),

(13, 13, **'08:00:00'**, **'17:00:00'**, 13),

(14, 14, **'08:00:00'**, **'17:00:00'**, 14),

(15, 15, **'08:00:00'**, **'17:00:00'**, 15),

(16, 16, **'08:00:00'**, **'17:00:00'**, 16),

(17, 17, **'08:00:00'**, **'17:00:00'**, 17),

(18, 18, **'08:00:00'**, **'17:00:00'**, 18),

(19, 19, **'08:00:00'**, **'17:00:00'**, 19),

(20, 20, **'08:00:00'**, **'17:00:00'**, 20),

(21, 21, **'08:00:00'**, **'17:00:00'**, 21),

(22, 22, **'08:00:00'**, **'17:00:00'**, 22),

(23, 23, **'08:00:00'**, **'17:00:00'**, 23),

(24, 24, **'08:00:00'**, **'17:00:00'**, 24),

(25, 25, **'08:00:00'**, **'17:00:00'**, 25),

(26, 26, **'08:00:00'**, **'17:00:00'**, 26),

(27, 27, **'08:00:00'**, **'17:00:00'**, 27),

(28, 28, **'08:00:00'**, **'17:00:00'**, 28),

(29, 29, **'08:00:00'**, **'17:00:00'**, 29),

(30, 30, **'08:00:00'**, **'17:00:00'**, 30),

(31, 31, **'08:00:00'**, **'17:00:00'**, 31),

(32, 32, **'08:00:00'**, **'17:00:00'**, 32),

(33, 33, **'08:00:00'**, **'17:00:00'**, 33),

(34, 34, **'08:00:00'**, **'17:00:00'**, 34),

(35, 35, **'08:00:00'**, **'17:00:00'**, 35);

**SELECT** \* **FROM** transport\_schedule ;

--Inserting records to user table

**INSERT** **INTO** **user** (***user\_id***, ***first\_name***, ***last\_name***, ***email\_address***, ***phone\_number***)

**VALUES**

(1, **'Mercy'**, **'Ogero'**, **'ogero@gmail.com'**, 62084819),

(2, **'Teresa'**, **'Munuve'**, **'Munuve@gmail.com'**, 47128843),

(3, **'Michael'**, **'Levin'**, **'levin@gmail.com'**, 62920015),

(4, **'Emily'**, **'Masita'**, **'masita@gmail.com'**, 57053674),

(5, **'Teresa'**, **'Ogero'**, **'ogero@gmail.com'**, 7664413),

(6, **'Sophia'**, **'kerubo'**, **'kerubo@gmail.com'**, 19936335),

(7, **'James'**, **'Muiruri'**, **'Muiruris@gmail.com'**, 66401543),

(8, **'Olivia'**, **'mbare'**, **'mbare@gmail.com'**, 7221629),

(9, **'Alexander'**, **'wanjuki'**, **'wanjuki@gmail.com'**, 24595077),

(10, **'Emma'**, **'kira'**, **'kira@gmail.com'**, 16870671),

(11, **'Daniel'**, **'wilele'**, **'wilele@gmail.com'**, 13591739),

(12, **'Isabella'**, **'Maoore'**, **'maore@gmail.com'**, 57797402),

(13, **'Matthew'**, **'kambar'**, **'kamba@gmail.com'**, 33839639),

(14, **'Mia'**, **'waru'**, **'waru@gmail.com'**, 70042175),

(15, **'Benjamin'**, **'Timau'**, **'timau@gmail.com'**, 77341808),

(16, **'Ava'**, **'Helsinki'**, **'helsinki@gmail.com'**, 53474362),

(17, **'Elijah'**, **'Kauri'**, **'kauri@gmail.com'**, 11097208),

(18, **'Charlotte'**, **'jambe'**, **'jambe@gmail.com'**, 66152864),

(19, **'Logan'**, **'amber'**, **'amber@gmail.com'**, 56528277),

(20, **'Amelia'**, **'Kiran'**, **'kiran@gmail.com'**, 28776413),

(21, **'Lucas'**, **'Warutere'**, **'warutere@gmail.com'**, 31338183),

(22, **'Evelyn'**, **'Adhiambo'**, **'adhiambo@gmail.com'**, 25991772),

(23, **'Mary'**, **'mugure'**, **'mugure@gmail.com'**, 75462294),

(24, **'William'**, **'kanyeki'**, **'kanyeki@gmail.com'**, 55133569),

(25, **'Aiden'**, **'Samba'**, **'samba@gmail.com'**, 10506514),

(26, **'Grace'**, **'Waceke'**, **'waceke@gmail.com'**, 25145998),

(27, **'Jackson'**, **'Kilili'**, **'kilili@gmail.com'**, 47448314),

(28, **'Scarlett'**, **'Gachanja'**, **'gachanja@gmail.com'**, 21622996),

(29, **'David'**, **'kanyi'**, **'kanyi@gmail.com'**, 22654498),

(30, **'Victoria'**, **'Rubadiri'**, **'rubadiri@gmail.com'**, 23490043);

**SELECT** \* **FROM** "user" *u* ;

-- Inserting records into the weekly\_report table

**INSERT** **INTO** weekly\_report (report\_id, weekly\_report\_library\_id, **date**, comments, ratings\_id)

**VALUES**

(1, 1, **'2024-01-07'**, **'Good progress this week.'**, 5),

(2, 2, **'2024-01-14'**, **'Excellent service by the librarians.'**, 3),

(3, 3, **'2024-01-21'**, **'More attention needs to be put on time management.'**, 5),

(4, 4, **'2024-01-28'**, **'Great Service, thanks.'**, 3),

(5, 5, **'2024-02-04'**, **'I loved the services and the books present in the library.'**, 4),

(6, 6, **'2024-02-11'**, **'Significant improvement in tasks.'**, 4),

(7, 7, **'2024-02-18'**, **'Delayed on some book loan services.'**, 2),

(8, 8, **'2024-02-25'**, **'Outstanding commitment in the library performance.'**, 5),

(9, 9, **'2024-03-03'**, **'Staff were unfriendly.'**, 3),

(10, 10, **'2024-03-10'**, **'Good work by the team.'**, 5),

(11, 11, **'2024-03-17'**, **'Needs better time management.'**, 2),

(12, 12, **'2024-03-24'**, **'Impressive innovation shown by the mobile libraries.'**, 4),

(13, 13, **'2024-03-31'**, **'Consistent and reliable work.'**, 4),

(14, 14, **'2024-04-07'**, **'Well Structured library, I love it.'**, 3),

(15, 15, **'2024-04-14'**, **'Exceptional team effort.'**, 5),

(16, 16, **'2024-04-21'**, **'Tasks completed on schedule.'**, 4),

(17, 17, **'2024-04-28'**, **'The librarain could use more attention to detail.'**, 3),

(18, 18, **'2024-05-05'**, **'Very proactive and diligent.'**, 5),

(19, 19, **'2024-05-12'**, **'Needs to enhance communication.'**, 2),

(20, 20, **'2024-05-19'**, **'High quality output this week.'**, 5),

(21, 21, **'2024-05-26'**, **'The team struggled with workload, More staff should be employed.'**, 3),

(22, 22, **'2024-06-02'**, **'Great improvement in library management.'**, 4),

(23, 23, **'2024-06-09'**, **'Exceeded expectations.'**, 5),

(24, 24, **'2024-06-16'**, **'Average performance overall.'**, 3),

(25, 25, **'2024-06-23'**, **'Very effective in handling book loans.'**, 4),

(26, 26, **'2024-06-30'**, **'Good progress this week.'**, 5),

(27, 27, **'2024-07-07'**, **'Great service from librarians.'**, 3),

(28, 28, **'2024-07-14'**, **'Excellent work on the new project.'**, 5),

(29, 29, **'2024-07-21'**, **'Average performance, can improve.'**, 3),

(30, 30, **'2024-07-28'**, **'Excellent Services.'**, 4);

**SELECT** \* **FROM** weekly\_report *wr* ;

--Inserting records to penalty\_and\_fine

**INSERT** **INTO** ***penalty\_and\_fine*** (***penalty\_and\_fine\_id***, ***first\_name***, ***last\_name***, ***phone\_number***, ***location***, ***penalty\_amount***, ***penalty\_date***)

**VALUES**

(1, **'Teresa'**, **'Munuve'**, 47128843, **'Chania'**, 100, **'2023-01-15'**)

(2, **'Michael'**, **'ogero'**, 62920015, **'Mangu'**, 150, **'2023-01-20'**),

(3, **'Emily'**, **'Masita Johnson'**, 57053674, **'Kiamwangi'**, 200, **'2023-02-05'**),

(4, **'Sophia'**, **'Kerubo'**, 19936335, **'Ngenda'**, 350, **'2023-03-01'**),

(5, **'James'**, **'Muiruri'**, 66401543, **'Murera'**, 400, **'2023-03-10'**),

(6, **'Mia'**, **'Waru'**, 70042175, **'Theta'**, 450, **'2023-03-15'**),

(7, **'Daniel'**, **'Wilele'**, 13591739, **'Juja'**, 500, **'2023-04-01'**),

(8, **'Ava'**, **'Helsinki'**, 53474362, **'Witeithie'**, 550, **'2023-04-10'**),

(9, **'Annelia'**, **'Kiran'**, 28776413, **'Kalimoni'**, 600, **'2023-04-20'**),

(10, **'Mary'**, **'Mugure'**, 75462294, **'Township'**, 650, **'2023-04-25'**),

(11, **'Aiden'**, **'Samba'**, 10506514, **'Kamenu'**, 700, **'2023-05-05'**),

(12, **'Lucas'**, **'Warutere'**, 31338183, **'Riabai'**, 750, **'2023-05-10'**),

(13, **'Grace'**, **'Waceke'**, 25145998, **'Gatuanyaga'**, 800, **'2023-05-15'**),

(14, **'Jackson'**, **'Kiliili'**, 47448314, **'Ngoliba'**, 850, **'2023-05-20'**),

(15, **'Scarlett'**, **'Gachanja'**, 21622996, **'Githothua'**, 900, **'2023-05-25'**),

(16, **'David'**, **'Kanyi'**, 22654498, **'Biashara'**, 950, **'2023-06-01'**);

**SELECT** \* **FROM** ***penalty\_and\_fine***;