**ACTIVITY 1.1: - Creating our own database**

The Database which I have chosen for this activity is the country-city database with the following tables and attributes.

1. country (country\_id Primary\_Key, country\_name, country\_code,country\_population)

|  |  |  |  |
| --- | --- | --- | --- |
| country\_id | country\_name | country\_code | country\_population |
| Integer | Text | Text | Text |
| 1 | India | IN | 1.37 Billion |

1. city (city\_id Primary\_Key, city\_name, city\_code, city\_major\_language, city\_population, country\_id Foreign\_Key)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| city\_id | city\_name | city\_code | city\_Major\_Language | city\_population | country\_id |
| Integer | Text | Text | Text | Text | Integer |
| 1 | Panipat | PNP | Haryanvi | 1.5 Million | 1 |

The referential integrity is maintained using the country\_id for country and city tables.

Text

Description automatically generated with medium confidence

**ACTIVITY 1.2: - Adding keys to the database**

The keys for the tables are mentioned below: -

1. Primary Keys: -
2. country: - country.country\_id
3. city: - city.city\_id
4. Foreign Key: -

city.country\_id references to country.country\_id 🡪 foreign key

Text, timeline

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**ACTIVITY 1.3: - Identifying the domains for the attributes**

1. country (country\_id Primary\_Key, country\_name, country\_code,country\_population)
2. city (city\_id Primary\_Key, city\_name, city\_code, city\_major\_language, city\_population, country\_id Foreign\_Key)

By describing the tables, we can see the attributes with their domains.

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**ACTIVITY 2.0: - Checking the database setup**

Here, in the second query, it shows an error as there is no where clause and “And” is used wrongly.

Outputs are: -

Query-1: - 1 row returned with title as “The Nickel Boys”

Query-2: - Improper syntax used and returns an error

Query-3: - Query-2 rectified.

Text

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**ACTIVITY 2.1: - Insert some tuples**

insert into authors values (23, 'clare pooley', 49);

insert into authors values (100, 'parth parashar', 50);

insert into books values (15, 'The Authenticity Project', 384, 'Romance', 23, 102);

Timeline

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**ACTIVITY 2.2: - Single Table queries**

Query-1: - select \* from books where pagecount > 400;

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Query-2: - select name from authors where id = 20;

Text

Description automatically generated with medium confidence

**ACTIVITY 2.3: - Two Table Queries**

Query-1: - select title from books B, publishers P where B.pubid = P.id and P.name = 'Viking';Text

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Query-2: - select name from authors A, Books B where A.id = B.authorid and B.pagecount>300;

Text

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