



slingshot college
(इस्लिङ्टन कलेज)

Module Code & Module Title
CC4057NI Introduction to Information Systems

Assessment Weightage & Type
30% Individual Coursework

Year and Semester
2021 Spring

Student Name: Aadarsha Muni Shakya

Group: N1

London Met ID:

College ID:NP01NT4S210023

Assignment Due Date: April 30, 2021

Assignment Submission Date: April 29, 2021

I confirm that I understand my coursework needs to be submitted online via Google Classroom under the relevant module page before the deadline in order for my assignment to be accepted and marked. I am fully aware that late submissions will be treated as non-submission and a marks of zero will be awarded

Table of Contents

Introduction	1
Database Model	2
Relational Model.....	3
Suppliers.....	4
Ice Cream	5
Customers	6
Ice-cream Supplier Details(ISD)	8
Ice-cream Customer Details(ICD).....	9
Data Dictionary	12
Queries	13
Conclusion.....	21
References	22

List of Figure

Figure 1: Entity Relation Model	2
Figure 2: Relational Diagram.....	3
Figure 3: Creating Suppliers Table.....	4
Figure 4: Describing Suppliers Table	4
Figure 5: Inserting into Suppliers Table.....	4
Figure 6: Selecting Suppliers Table	5
Figure 7: Creating Ice Cream Table	5
Figure 8: Describing Ice Cream Table.....	5
Figure 9: Inserting into Ice Cream Table	6
Figure 10: Selecting Ice Cream Table	6
Figure 11: Creating Customers Table	6
Figure 12: Describing Customers Table	7
Figure 13: Inserting into Customers Table	7
Figure 14: Selecting Customers Table	7
Figure 15: Creating ISD Table.....	8
Figure 16: Describing ISD Table	8
Figure 17: Inserting into ISD Table.....	8
Figure 18: Selecting ISD Table	9
Figure 19: Creating ICD Table	10
Figure 20: Describing ICD Table	10
Figure 21: Inserting into ICD Table	10
Figure 22: Selecting ICD Table	11
Figure 23: Query 1	13
Figure 24: Query 2	13
Figure 25: Query 3	14
Figure 26: Query 4	14
Figure 27: Query 5	15
Figure 28: Query 6	16
Figure 29: Query 7	17
Figure 30: Query 8	18
Figure 31: Query 9	19
Figure 32: Query 10	20

List of Tables

Table 1: Data Dictionary(Suppliers)	12
Table 2: Data Dictionary(Ice Cream)	12
Table 3: Data Dictionary(Customers)	12
Table 4 Data Dictionary(ISD)	12
Table 5: Data Dictionary(ICD)	12
Table 6: Querie1	13
Table 7 Query 2	13
Table 8 Query 3	14
Table 9 Query 4	14
Table 10 Query 5	15
Table 11: Query 6	16
Table 12: Query 7	17
Table 13: Query 8	18
Table 14: Query 9	19
Table 15: Query 10.....	20

Introduction

Databases are the collection of raw data which is processed to form information which is kept in an organised manner for quick and easy access. Moreover, Data is unprocessed and unorganized facts that are random and might not carry any significant meaning. Whereas, information is the processed data which delivers a certain meaning and is displayed according to the need of the user.

Talking about the business the ice cream store serves each-and-every type of ice cream found in Nepal. Namely, Ice Cream Cone, Ice Cream Bowl, Chocolate Bar, Soft Serve, and Kulfi. Not just the type, but all brands of ice cream is accessible. Those brand names include Nepal Dairy, Lovebirds, Azzabko, Snow Fun, Martin, and Baskin Robbins.

Moreover, the goal of Ice cream store is to fulfil the needs and wants of the new as well as existing customers. Customers can purchase as much ice cream as they need. Also, the same ice cream can be sold to all customers. By doing so the business goal is met.

Database Model

The business rule of ice cream store is all customers can buy ice cream of various brands and types. By this business rule many-to-many relation is formed between Suppliers, Ice Cream and Customers, Ice Cream so, two separate bridge entities are formed.

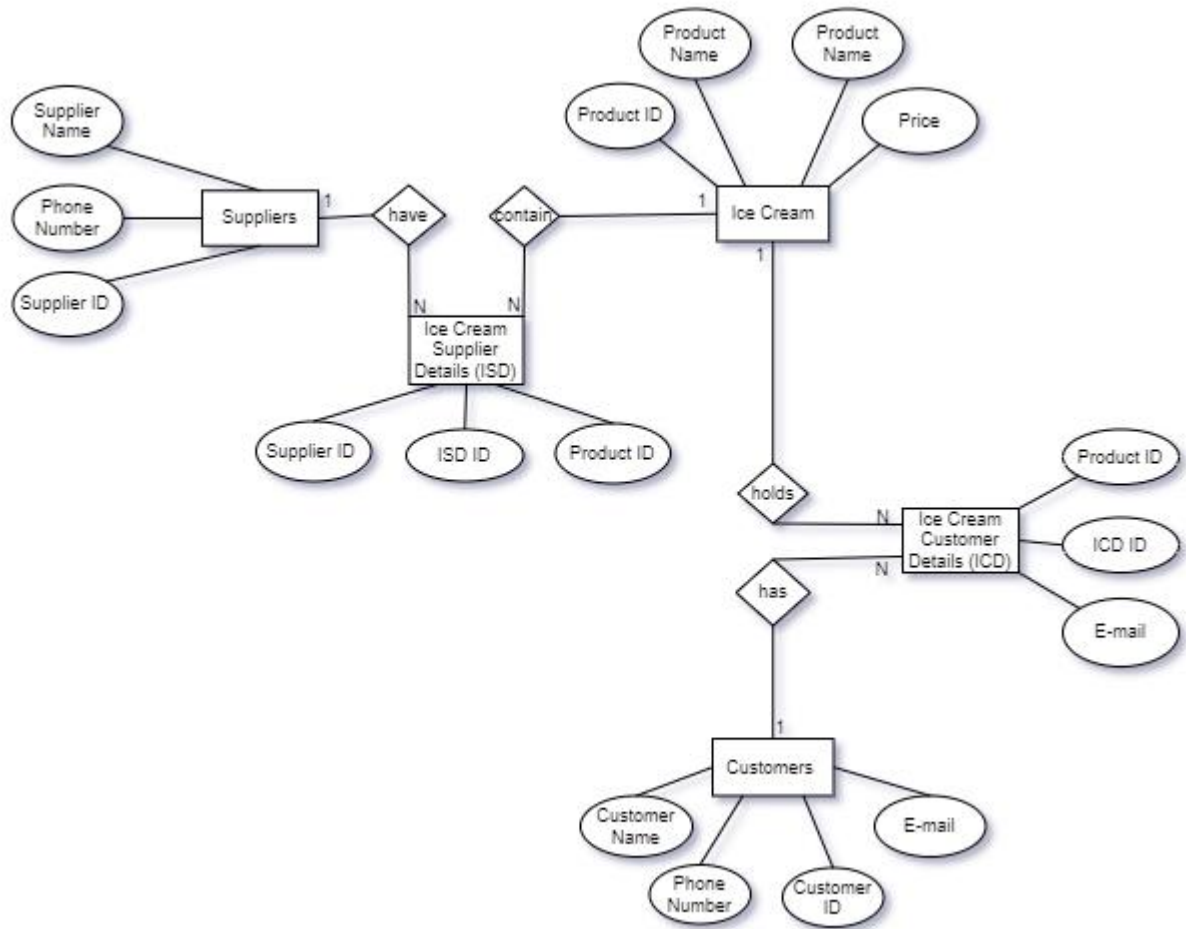


Figure 1: Entity Relation Model

Relational Model

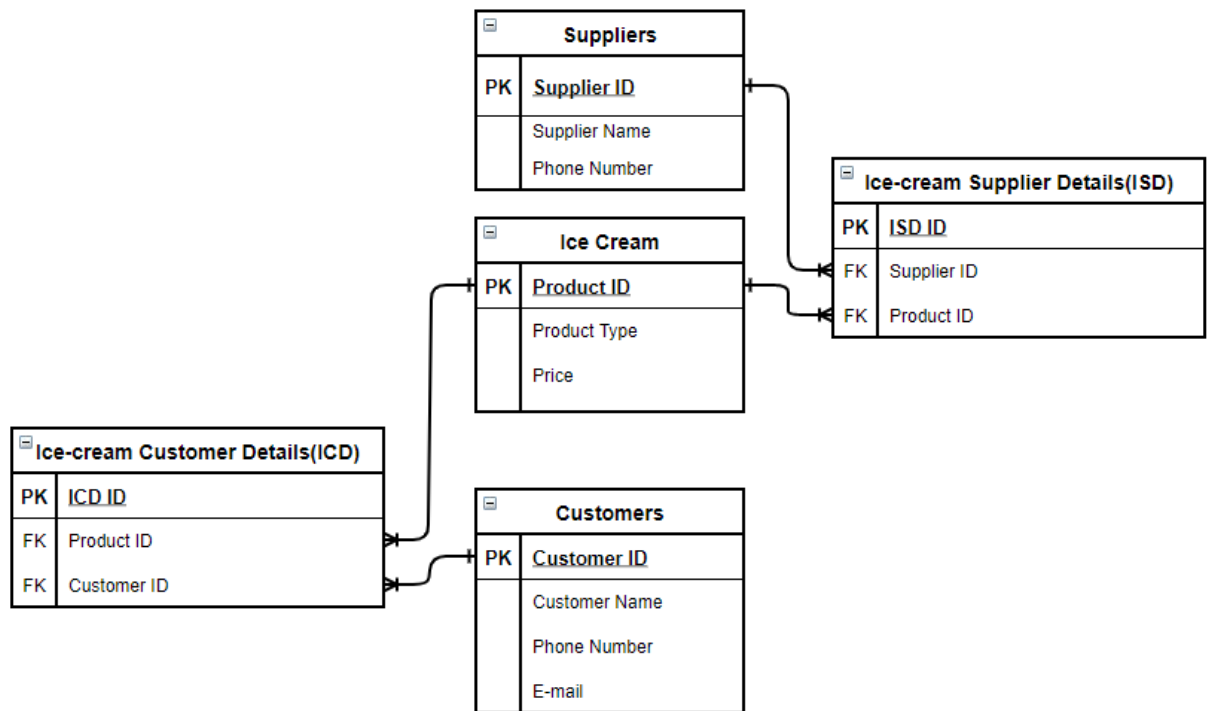


Figure 2: Relational Diagram

Suppliers

Table suppliers is created to store records of ice-cream suppliers of the business. In this table Supplier ID, Supplier Name and Phone Number are created to store its attributes. Supplier ID is the primary of the table which uniquely identifies other attributes. Similarly, Supplier Name and Phone Number stores the name of supplier and their phone number for any need of stock.

```
MariaDB [cw2]> CREATE TABLE Suppliers(SupplierID INT PRIMARY KEY AUTO_INCREMENT UNIQUE, SupplierName VARCHAR(255) NOT NULL, PhoneNumber INT UNIQUE);  
Query OK, 0 rows affected (0.411 sec)
```

Figure 3: Creating Suppliers Table

```
MariaDB [cw2]> DESCRIBE Suppliers;  
+-----+-----+-----+-----+-----+-----+  
| Field      | Type          | Null | Key | Default | Extra          |  
+-----+-----+-----+-----+-----+-----+  
| SupplierID | int(11)       | NO   | PRI | NULL    | auto_increment |  
| SupplierName | varchar(255)  | NO   |     | NULL    |                |  
| PhoneNumber | int(11)       | YES  | UNI | NULL    |                |  
+-----+-----+-----+-----+-----+-----+  
3 rows in set (0.437 sec)
```

Figure 4: Describing Suppliers Table

```
MariaDB [cw2]> INSERT INTO Suppliers VALUES  
-> ("","Nepal Dairy",1234567),  
-> ("","Lovebirds",2345678),  
-> ("","Azzabko",3456789),  
-> ("","Snow Fun",4456789),  
-> ("","Baskin Robbins",2234567),  
-> ("","Martin",1134567);  
Query OK, 6 rows affected, 6 warnings (0.138 sec)  
Records: 6 Duplicates: 0 Warnings: 6
```

Figure 5: Inserting into Suppliers Table


```
MariaDB [cw2]> SELECT * from Suppliers;
```

SupplierID	SupplierName	PhoneNumber
1	Nepal Dairy	1234567
2	Lovebirds	2345678
3	Azzabko	3456789
4	Snow Fun	4456789
5	Baskin Robbins	2234567
6	Martin	1134567

```
6 rows in set (0.037 sec)
```

Figure 6: Selecting Suppliers Table

Ice Cream

Table Ice Cream is created to store records of different type of ice-cream served by the business. In this table Product ID, Product Type and Price is created to store its attributes. Product ID is the primary of the table which uniquely identifies other attributes. Similarly, Product Type and Price stores the type of ice-cream and its price.

```
MariaDB [cw2]> CREATE TABLE IceCream (ProductID int PRIMARY KEY AUTO_INCREMENT UNIQUE, ProductType VARCHAR(255) UNIQUE, Price int NOT NULL);  
Query OK, 0 rows affected (0.342 sec)
```

Figure 7: Creating Ice Cream Table

```
MariaDB [cw2]> DESCRIBE IceCream;
```

Field	Type	Null	Key	Default	Extra
ProductID	int(11)	NO	PRI	NULL	auto_increment
ProductType	varchar(255)	YES	UNI	NULL	
Price	int(11)	NO		NULL	

```
3 rows in set (0.398 sec)
```

Figure 8: Describing Ice Cream Table

```
MariaDB [cw2]> INSERT INTO IceCream VALUES
-> ("","Ice Cream Cone",150),
-> ("","Ice Cream Bowl",300),
-> ("","Chocolate Bar",100),
-> ("","Soft Serve",50),
-> ("","Kulfi",20);
Query OK, 5 rows affected, 5 warnings (0.095 sec)
Records: 5  Duplicates: 0  Warnings: 5
```

Figure 9: Inserting into Ice Cream Table

```
MariaDB [cw2]> SELECT * FROM IceCream;
+-----+-----+-----+
| ProductID | ProductType | Price |
+-----+-----+-----+
| 1 | Ice Cream Cone | 150 |
| 2 | Ice Cream Bowl | 300 |
| 3 | Chocolate Bar | 100 |
| 4 | Soft Serve | 50 |
| 5 | Kulfi | 20 |
+-----+-----+-----+
5 rows in set (0.004 sec)
```

Figure 10: Selecting Ice Cream Table

Customers

Table Customers is created to store records of the customer who purchases ice-cream from the business. In this table Customer ID, Customer Name, E-mail and Phone Number are created to store its attributes. Customer ID is the primary of the table which uniquely identifies other attributes. Also, Customer Name, E-mail and Phone Number stores information about customers to make the business user friendly.

```
MariaDB [cw2]> CREATE TABLE Customers (CustomerID INT PRIMARY KEY AUTO_INCREMENT, CustomerName VARCHAR(255) DEFAULT "Customer", PhoneNumber INT NOT NULL UNIQUE, Email V
ARCHAR(255) UNIQUE);
```

Figure 11: Creating Customers Table

```
MariaDB [cw2]> DESC Customers;
```

Field	Type	Null	Key	Default	Extra
CustomerID	int(11)	NO	PRI	NULL	auto_increment
PhoneNumber	int(11)	NO	UNI	NULL	
Email	varchar(255)	YES	UNI	NULL	
CustomerName	varchar(255)	YES		Customer	

```
4 rows in set (0.323 sec)
```

Figure 12: Describing Customers Table

```
MariaDB [cw2]> INSERT INTO Customers VALUES
-> ("","Ram",12345,"Ram@icecream.com"),
-> ("","Harry",23456,"Harry@icecream.com"),
-> ("","JJ",34567,"jj@icecream.com"),
-> ("","Jak",66666,"jakpool@icecream.com"),
-> ("","Alex",45678,"alex@icecream.com");
Query OK, 5 rows affected, 5 warnings (0.212 sec)
Records: 5 Duplicates: 0 Warnings: 5
```

Figure 13: Inserting into Customers Table

```
MariaDB [cw2]> SELECT * FROM Customers;
```

CustomerID	CustomerName	PhoneNumber	Email
1	Ram	12345	Ram@icecream.com
2	Harry	23456	Harry@icecream.com
3	JJ	34567	jj@icecream.com
4	Jak	66666	jakpool@icecream.com
5	Alex	45678	alex@icecream.com

```
5 rows in set (0.003 sec)
```

Figure 14: Selecting Customers Table

Ice-cream Supplier Details(ISD)

Table Ice-Cream Supplier Details(ISD) is created as a bridge entity which avoids the many-to-many relation between two tables. In this table ISD ID is the primary key; Supplier ID, and Product ID are the foreign keys with reference from Suppliers and Ice Cream tables.

```
MariaDB [cw2]> Create TABLE ISD(ISDID INT PRIMARY KEY AUTO_INCREMENT, SupplierID INT NOT NULL, ProductID INT NOT NULL , FOREIGN KEY(SupplierID) REFERENCES Suppliers(SupplierID), FOREIGN KEY(ProductID) REFERENCES IceCream(ProductID));
Query OK, 0 rows affected (0.440 sec)
```

Figure 15: Creating ISD Table

```
MariaDB [cw2]> DESC ISD;
```

Field	Type	Null	Key	Default	Extra
ISDID	int(11)	NO	PRI	NULL	auto_increment
SupplierID	int(11)	NO	MUL	NULL	
ProductID	int(11)	NO	MUL	NULL	

3 rows in set (0.749 sec)

Figure 16: Describing ISD Table

```
MariaDB [cw2]> INSERT INTO ISD VALUES
-> ('',1,1), ('',1,2), ('',1,3), ('',1,4), ('',1,5),
-> ('',2,1), ('',2,2), ('',2,3), ('',2,4), ('',2,5),
-> ('',3,1), ('',3,2), ('',3,3), ('',3,4), ('',3,5),
-> ('',4,1), ('',4,2), ('',4,3), ('',4,4), ('',4,5),
-> ('',5,1), ('',5,2), ('',5,3), ('',5,4), ('',5,5),
-> ('',6,1), ('',6,2), ('',6,3), ('',6,4), ('',6,5);
Query OK, 30 rows affected, 30 warnings (0.222 sec)
Records: 30 Duplicates: 0 Warnings: 30
```

Figure 17: Inserting into ISD Table

```
MariaDB [cw2]> SELECT * from ISD;
```

ISDID	SupplierID	ProductID
1	1	1
2	1	2
3	1	3
4	1	4
5	1	5
6	2	1
7	2	2
8	2	3
9	2	4
10	2	5
11	3	1
12	3	2
13	3	3
14	3	4
15	3	5
16	4	1
17	4	2
18	4	3
19	4	4
20	4	5
21	5	1
22	5	2
23	5	3
24	5	4
25	5	5
26	6	1
27	6	2
28	6	3
29	6	4
30	6	5

```
30 rows in set (0.004 sec)
```

Figure 18: Selecting ISD Table

Ice-cream Customer Details(ICD)

Similarly, table Ice-Cream Customer Details(ICD) is created as a bridge entity which avoids the many-to-many relation between Ice-cream and Customers tables. In this table ICD ID is the primary key; Customer ID, and Product ID are the foreign keys with reference from Customers and Ice Cream tables.

```
MariaDB [cw2]> Create TABLE ICD(ICDID INT PRIMARY KEY AUTO_INCREMENT, ProductID INT NOT NULL , CustomerID INT NOT NULL, FOREIGN KEY(ProductID) REFERENCES IceCream(ProductID), FOREIGN KEY(CustomerID) REFERENCES Customers(CustomerID));
Query OK, 0 rows affected (0.365 sec)
```

Figure 19: Creating ICD Table

```
MariaDB [cw2]> DESC ICD;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| ICDID      | int(11)   | NO   | PRI | NULL    | auto_increment |
| ProductID  | int(11)   | NO   | MUL | NULL    |                |
| CustomerID | int(11)   | NO   | MUL | NULL    |                |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.031 sec)
```

Figure 20: Describing ICD Table

```
MariaDB [cw2]> INSERT INTO ICD VALUES
-> ('',1,1), ('',1,2), ('',1,3), ('',1,4), ('',1,5),
-> ('',2,1), ('',2,2), ('',2,3), ('',2,4), ('',2,5),
-> ('',3,1), ('',3,2), ('',3,3), ('',3,4), ('',3,5),
-> ('',4,1), ('',4,2), ('',4,3), ('',4,4), ('',4,5),
-> ('',5,1), ('',5,2), ('',5,3), ('',5,4), ('',5,5);
Query OK, 25 rows affected, 25 warnings (0.410 sec)
Records: 25  Duplicates: 0  Warnings: 25
```

Figure 21: Inserting into ICD Table

```
MariaDB [cw2]> SELECT * FROM ICD;
```

ICDID	ProductID	CustomerID
1	1	1
2	1	2
3	1	3
4	1	4
5	1	5
6	2	1
7	2	2
8	2	3
9	2	4
10	2	5
11	3	1
12	3	2
13	3	3
14	3	4
15	3	5
16	4	1
17	4	2
18	4	3
19	4	4
20	4	5
21	5	1
22	5	2
23	5	3
24	5	4
25	5	5

```
25 rows in set (0.003 sec)
```

Figure 22: Selecting ICD Table

Data Dictionary

Table 1: Data Dictionary(Suppliers)

Entity Name	Entity Description	Column Name	Column Description	Data Type	Length	Primary Key	Foreign Key	Nullable	Unique	Notes
Suppliers	Created to store details about its suppliers	Supplier ID	Contains Supplier ID	INT	11	TRUE	FALSE	FALSE	TRUE	Auto Increment
		Supplier Name	Contains Supplier Name	VARCHAR	255	FALSE	FALSE	FALSE	FALSE	
		Phone Number	Contains Supplier Phone number	INT	11	FALSE	FALSE	TRUE	TRUE	

Table 2: Data Dictionary(Ice Cream)

Entity Name	Entity Description	Column Name	Column Description	Data Type	Length	Primary Key	Foreign Key	Nullable	Unique	Notes
Ice Cream	Created to store details about the product they sell	Product ID	Contains Product ID	INT	11	TRUE	FALSE	FALSE	TRUE	Auto Increment
		Product Type	Contains Product Type	VARCHAR	255	FALSE	FALSE	TRUE	FALSE	
		Price	Contains Product Price	INT	11	FALSE	FALSE	FALSE	FALSE	

Table 3: Data Dictionary(Customers)

Entity Name	Entity Description	Column Name	Column Description	Data Type	Length	Primary Key	Foreign Key	Nullable	Unique	Notes
Customers	Created to store information about its customers	Customer ID	Contains Customer ID	INT	11	TRUE	FALSE	FALSE	TRUE	Auto Increment
		Customer Name	Contains Customer Name	VARCHAR	255	FALSE	FALSE	FALSE	FALSE	
		Phone Number	Contains Customer Phone number	INT	11	FALSE	FALSE	FALSE	TRUE	
		E-mail	Contains Customer e-mail address	VARCHAR	255	FALSE	FALSE	TRUE	TRUE	

Table 4 Data Dictionary(ISD)

Entity Name	Entity Description	Column Name	Column Description	Data Type	Length	Primary Key	Foreign Key	Nullable	Unique	Notes
Ice-cream Supplier Details(ISD)	Bridge Entity formed to avoid many-to-many relation	ISD ID	Contains Ice Cream Suppliers Details ID	INT	11	TRUE	FALSE	FALSE	TRUE	Auto Increment
		Supplier ID	Contains Supplier ID	INT	11	FALSE	TRUE	FALSE	TRUE	Refers to Supplier ID of Suppliers Table
		Product ID	Contains Product ID	INT	11	FALSE	TRUE	FALSE	TRUE	Refers to Product ID of Ice Cream Table

Table 5: Data Dictionary(ICD)

Entity Name	Entity Description	Column Name	Column Description	Data Type	Length	Primary Key	Foreign Key	Nullable	Unique	Notes
Ice-cream Customer Details(ICD)	Bridge Entity formed to avoid many-to-many relation	ICD ID	Contains Ice Cream Customers Details ID	INT	11	TRUE	FALSE	FALSE	TRUE	Auto Increment
		Customer ID	Contains Customer ID	INT	11	FALSE	TRUE	FALSE	TRUE	Refers to Customers ID of Customers Table
		Product ID	Contains Product ID	INT	11	FALSE	TRUE	FALSE	TRUE	Refers to Product ID of Ice Cream Table

Queries

Table 6: Querie1

Query Number	Query 1
Query	SELECT * FROM Customers ORDER BY CustomerName DESC;
Keywords Used	SELECT, FROM, ORDER BY, DESC
Purpose/Result	Selecting Customers name in descending

CustomerID	CustomerName	PhoneNumber	Email
1	Ram	12345	Ram@icecream.com
3	JJ	34567	jjicecream.com
5	Jak	66666	jakpool@icecream.com
2	Harry	23456	Harry@icecream.com
4	Alex	45678	alex@icecream.com

5 rows in set (0.003 sec)

Figure 23: Query 1

Table 7 Query 2

Query Number	Query 2
Query	SELECT * FROM Suppliers LIMIT 3;
Keywords Used	SELECT, FROM, LIMIT
Purpose/Result	Selecting top 3 data from Suppliers table

SupplierID	SupplierName	PhoneNumber
1	Nepal Dairy	1234567
2	Lovebirds	2345678
3	Azzabko	3456789

3 rows in set (0.002 sec)

Figure 24: Query 2

Table 8 Query 3

Query Number	Query 3
Query	SELECT DISTINCT(Price) FROM Icecream;
Keywords Used	SELECT, DISTINCT(), FROM
Purpose/Result	Selecting unique price from Icecream table

```
+-----+  
| Price |  
+-----+  
| 150 |  
| 300 |  
| 100 |  
| 50 |  
| 20 |  
+-----+  
5 rows in set (0.039 sec)
```

Figure 25: Query 3

Table 9 Query 4

Query Number	Query 4
Query	SELECT COUNT(*) AS total_items FROM ISD;
Keywords Used	SELECT, COUNT, AS, FROM
Purpose/Result	Counting total number of items from ISD table

```
+-----+  
| total_items |  
+-----+  
| 30 |  
+-----+  
1 row in set (0.096 sec)
```

Figure 26: Query 4

Table 10 Query 5

Query Number	Query 5
Query	SELECT * FROM Icecream WHERE Price BETWEEN 100 AND 300;
Keywords Used	SELECT, FROM, WHERE, BETWEEN, AND
Purpose/Result	Selecting ice-cream which price is between 100 to 300

ProductID	ProductType	Price
1	Ice Cream Cone	150
2	Ice Cream Bowl	300
3	Chocolate Bar	100

3 rows in set (0.002 sec)

Figure 27: Query 5

Table 11: Query 6

Query Number	Query 6
Query	SELECT * FROM ICD WHERE CustomerID IN(1,2,3);
Keywords Used	SELECT, FROM, WHERE, IN
Purpose/Result	Selecting data that have CustomerID 1,2 and 3

ICDID	ProductID	CustomerID
1	1	1
2	1	2
3	1	3
6	2	1
7	2	2
8	2	3
11	3	1
12	3	2
13	3	3
16	4	1
17	4	2
18	4	3
21	5	1
22	5	2
23	5	3

15 rows in set (0.002 sec)

Figure 28: Query 6

Table 12: Query 7

Query Number	Query 7
Query	SELECT * FROM Customers WHERE CustomerName LIKE '_a%';
Keywords Used	SELECT, FROM, WHERE , LIKE
Purpose/Result	Selecting Customers who's second character is 'a'

```
MariaDB [cw2]> SELECT * FROM Customers WHERE CustomerName LIKE '_a%';
+-----+-----+-----+-----+
| CustomerID | CustomerName | PhoneNumber | Email |
+-----+-----+-----+-----+
| 1 | Ram | 12345 | Ram@icecream.com |
| 2 | Harry | 23456 | Harry@icecream.com |
| 5 | Jak | 66666 | jakpool@icecream.com |
+-----+-----+-----+-----+
3 rows in set (0.041 sec)
```

Figure 29: Query 7

Table 13: Query 8

Query Number	Query 8
Query	SELECT ProductID,COUNT(*) AS TotalProduct FROM ISD GROUP BY ProductID;
Keywords Used	SELECT, COUNT, AS, FROM, GROUP BY
Purpose/Result	Selecting SupplierID and Counting total number of product offered by a supplier

SupplierID	TotalProduct
1	5
2	5
3	5
4	5
5	5
6	5

6 rows in set (0.038 sec)

Figure 30: Query 8

Table 14: Query 9

Query Number	Query 9
Query	SELECT ProductID,Count(CustomerID) AS TotalCustomers FROM ICD GROUP BY ProductID HAVING ProductID = 1;
Keywords Used	SELECT, Count, AS, FROM, GROUP BY, HAVING
Purpose/Result	Selecting ProductID and counting number of customers who can have ice-cream with ProductID 1

```
+-----+-----+  
| ProductID | TotalCustomers |  
+-----+-----+  
|          1 |             5 |  
+-----+-----+  
1 row in set (0.003 sec)
```

Figure 31: Query 9

Table 15: Query 10

Query Number	Query 10
Query	SELECT * FROM Suppliers JOIN ISD ON Suppliers.SupplierID = ISD.SupplierID;
Keywords Used	SELECT, FROM, JOIN, ON
Purpose/Result	Joining two Tables with similar SupplierID

SupplierID	SupplierName	PhoneNumber	ISDID	SupplierID	ProductID
1	Nepal Dairy	1234567	1	1	1
1	Nepal Dairy	1234567	2	1	2
1	Nepal Dairy	1234567	3	1	3
1	Nepal Dairy	1234567	4	1	4
1	Nepal Dairy	1234567	5	1	5
2	Lovebirds	2345678	6	2	1
2	Lovebirds	2345678	7	2	2
2	Lovebirds	2345678	8	2	3
2	Lovebirds	2345678	9	2	4
2	Lovebirds	2345678	10	2	5
3	Azzabko	3456789	11	3	1
3	Azzabko	3456789	12	3	2
3	Azzabko	3456789	13	3	3
3	Azzabko	3456789	14	3	4
3	Azzabko	3456789	15	3	5
4	Snow Fun	4456789	16	4	1
4	Snow Fun	4456789	17	4	2
4	Snow Fun	4456789	18	4	3
4	Snow Fun	4456789	19	4	4
4	Snow Fun	4456789	20	4	5
5	Baskin Robbins	2234567	21	5	1
5	Baskin Robbins	2234567	22	5	2
5	Baskin Robbins	2234567	23	5	3
5	Baskin Robbins	2234567	24	5	4
5	Baskin Robbins	2234567	25	5	5
6	Martin	1134567	26	6	1
6	Martin	1134567	27	6	2
6	Martin	1134567	28	6	3
6	Martin	1134567	29	6	4
6	Martin	1134567	30	6	5

30 rows in set (0.002 sec)

Figure 32: Query 10

Conclusion

For conclusion, Databases are the collection of raw data which is processed to form information which is kept in an organised manner for quick and east assess. Then those data are stored in different tables as entities. Before creating database, Relational Diagram and Entity Relation Diagram are created for visual representations which makes it less complex. Moreover, Data dictionary also helps in understanding the database; The details about the database like Entity name, Column name, Data type, Primary key, Foreign key, Null able Unique and many more can help to understand the database.

References

Zwass, V., 2016. *Encyclopedia Britannica*. [Online]
Available at: <https://www.britannica.com/technology/data-processing>
[Accessed 11 April 2021].