End Sem Project

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Initially all the data objects, category objects, their attributes and datatypes are entered in the given GUI tool.

Screenshots of successful storage of data is shown below:

1. Required Restock

2. Storage Capacity

Confirm Entered Data Object   — □ ×

Following was Entered

Data Object StorageCapacity

History

Period -   **Duration** -

DataObject and C...

Attribute Name	Data Type
vacant	int
used	int

Categories and Contains Cate...

Category	SubCategory of
location	
date	

Category Attributes

Category	Attribute Name	Data Type
date	date	datetime
location	address	varchar

Go Ahead and Save Data   **Cancel**

3. Market Price

Confirm Entered Data Object   — □ ×

Following was Entered

Data Object MarketPrice

History

Period daily   **Duration** 2   years

DataObject and C...

Attribute Name	Data Type
quantitysoldinmarket	numeric
priceinmarket	numeric
quantityinmarket	numeric

Categories and Contains Cate...

Category	SubCategory of
market	
day	
quality	

Category Attributes

Category	Attribute Name	Data Type
market	name	varchar
day	day	datetime
quality	qualityrating	numeric

Go Ahead and Save Data   **Cancel**

4. Agreement to Sell

Confirm Entered Data Object

Following was Entered

Data Object — AgreementToSell

History

Period — none   **Duration** — 5   years

DataObject and C...

Attribute Name	Data Type
qualityagreed	varchar
quantityagreed	numeric
priceagreed	numeric
commissionrateagrred	numeric

Categories and Contains Cate...

Category	SubCategory of
vyapari	
date	

Data Save Status

⚠ **Saved Successfully**

[OK]

Category Attributes

Category	Attribute Name	Data Type
date	date	datetime
vyapari	address	varchar
vyapari	name	varchar
vyapari	telephone	numeric

[Go Ahead and Save Data]   [Cancel]

5. Business Ease

Confirm Entered Data Object

Following was Entered

Data Object — BusinessEase

History

Period — -   **Duration** — -

DataObject and C...

Attribute Name	Data Type
easynewprice	numeric
easynewquantity	numeric
easyqualitychange	varchar

Categories and Contains Cate...

Category	SubCategory of
vyapari	
date	

Data Save Status

⚠ **Saved Successfully**

[OK]

Category Attributes

Category	Attribute Name	Data Type
date	date	datetime
vyapari	address	varchar
vyapari	name	varchar
vyapari	telephone	numeric

[Go Ahead and Save Data]   [Cancel]

6. Performance

Confirm Entered Data Object

Following was Entered

Data Object: Performance

History

| Period | none | Duration | 5 | years |

DataObject and C...

Attribute Name	Data Type
quantitysupplied	numeric
punctualsupply	varchar
quantityagreed	numeric
deliveryleadtime	datetime
qualitysupplied	varchar
qualityagreed	varchar

Categories and Contains Cate...

Category	SubCategory of
vyapari	
agreement	
deliverydate	

Data Save Status
Saved Successfully
OK

Category Attributes

Category	Attribute Name	Data Type
vyapari	address	varchar
vyapari	name	varchar
vyapari	telephone	numeric
agreement	id	varchar
deliverydate	date	datetime

Go Ahead and Save Data   Cancel

7. Delivery Time Agreement

Confirm Entered Data Object

Following was Entered

Data Object: DeliveryTimeAgreement

History

| Period | none | Duration | 5 | years |

DataObject and C...

Attribute Name	Data Type
deliverytimepriceagreed	numeric
quantityagreed	numeric
deliveredquality	varchar
originalpriceagreed	numeric
qualityagreed	varchar
commissionrateagreed	numeric

Categories and Contains Cate...

Category	SubCategory of
vyapari	
date	

Data Save Status
Saved Successfully
OK

Category Attributes

Category	Attribute Name	Data Type
date	date	datetime
vyapari	address	varchar
vyapari	name	varchar
vyapari	telephone	numeric

Go Ahead and Save Data   Cancel

8. Daily Agreement

Confirm Entered Data Object

Following was Entered

Data Object — DailtyAgreement

History

Period	daily	Duration	5	years

DataObject and C...

Attribute Name	Data Type
quantity	numeric
commissionrate	numeric
price	numeric
quality	varchar

Categories and Contains Cate...

Category	SubCategory of
vyapari	
day	

Data Save Status ✕

⚠ Saved Successfully

OK

Category Attributes

Category	Attribute Name	Data Type
vyapari	address	varchar
vyapari	name	varchar
vyapari	telephone	numeric
day	day	datetime

Go Ahead and Save Data   Cancel

9. Sale

Confirm Entered Data Object

Following was Entered

Data Object — Sale

History

Period	-	Duration	-

DataObject and C...

Attribute Name	Data Type
amount	numeric
quantity	numeric

Categories and Contains Cate...

Category	SubCategory of
customer	
date	
quality	
mode	

Data Save Status ✕

⚠ Saved Successfully

OK

Category Attributes

Category	Attribute Name	Data Type
date	date	datetime
mode	credit	numeric
mode	cash	numeric
customer	address	varchar
customer	name	varchar
quality	qualityrating	numeric

Go Ahead and Save Data   Cancel

10. Market Price1

Confirm Entered Data Object

Following was Entered

Data Object   MarketPrice1

History

Period   -   Duration   -

DataObject and C...

Attribute Name	Data Type
price	numeric
quality	varchar

Categories and Contains Cate...

Category	SubCategory of
market	
day	

Data Save Status

⚠ Saved Successfully

OK

Category Attributes

Category	Attribute Name	Data Type
market	name	varchar
day	day	datetime

Go Ahead and Save Data   **Cancel**

11. Discarded Stock

Confirm Entered Data Object

Following was Entered

Data Object   Discardedstock

History

Period   daily   Duration   2   years

DataObject and C...

Attribute Name	Data Type
quantitythrown	numeric

Categories and Contains Cate...

Category	SubCategory of
vyapari	
date	

Data Save Status

⚠ Saved Successfully

OK

Category Attributes

Category	Attribute Name	Data Type
date	date	datetime
vyapari	address	varchar
vyapari	name	varchar
vyapari	telephone	numeric

Go Ahead and Save Data   **Cancel**

12. Order1

Confirm Entered Data Object　　　　　　　　　　　— ☐ ✕

Following was Entered

Data Object　　　Order

History

Period　　-　　　　　**Duration**　　-

DataObject and C...

Attribute Name	Data Type
amount	numeric
quantity	numeric

Categories and Contains Cate...

Category	SubCategory of
vyapari	
customer	
date	
quality	

Data Save Status　　　✕

⚠ **Saved Successfully**

OK

Category Attributes

Category	Attribute Name	Data Type
date	date	datetime
vyapari	address	varchar
vyapari	name	varchar
vyapari	telephone	numeric
customer	address	varchar
customer	name	varchar
quality	qualityrating	numeric

Go Ahead and Save Data　　　　　**Cancel**

13. Stock in hand

Confirm Entered Data Object　　　　　　　　　　　— ☐ ✕

Following was Entered

Data Object　　　StockInHand

History

Period　　-　　　　　**Duration**　　-

DataObject and C...

Attribute Name	Data Type
totalquantityinhand	numeric

Categories and Contains Cate...

Category	SubCategory of
vyapari	
day	
quality	

Data Save Status　　　✕

⚠ **Saved Successfully**

OK

Category Attributes

Category	Attribute Name	Data Type
vyapari	address	varchar
vyapari	name	varchar
vyapari	telephone	numeric
day	day	datetime
quality	qualityrating	numeric

Go Ahead and Save Data　　　　　**Cancel**

14. Daily Earning

Confirm Entered Data Object

Following was Entered

Data Object   DailyEarning

History

Period   -   **Duration**   -

DataObject and C...

Attribute Name	Data Type
quantity	numeric
commissionrate	numeric
sellingrate	numeric

Categories and Contains Cate...

Category	SubCategory of
date	

Data Save Status ✕

⚠ Saved Successfully

OK

Category Attributes

Category	Attribute Name	Data Type
date	date	datetime

Go Ahead and Save Data   Cancel

15. Agreed Commission

Confirm Entered Data Object

Following was Entered

Data Object   AgreedCommission

History

Period   -   **Duration**   -

DataObject and C...

Attribute Name	Data Type
qualityagreed	varchar
quantityagreed	numeric
priceagreed	numeric
agreedcommissionrate	numeric

Categories and Contains Cate...

Category	SubCategory of
vyapari	
day	

Data Save Status ✕

⚠ Saved Successfully

OK

Category Attributes

Category	Attribute Name	Data Type
vyapari	address	varchar
vyapari	name	varchar
vyapari	telephone	numeric
day	day	datetime

Go Ahead and Save Data   Cancel

16. Daily Sales

Confirm Entered Data Object — ☐ ✕

Following was Entered

Data Object   DailySales

History

Period   -   **Duration**   -

DataObject and C...

Attribute Name	Data Type
discount	numeric
quantity	numeric
price	numeric

Categories and Contains Cate...

Category	SubCategory of
quality	
date	

Data Save Status   ✕

⚠ **Saved Successfully**

[OK]

Category Attributes

Category	Attribute Name	Data Type
date	date	datetime
quality	qualityrating	numeric

[Go Ahead and Save Data]   [Cancel]

17. Commission Due

Confirm Entered Data Object — ☐ ✕

Following was Entered

Data Object   CommissionDue

History

Period   -   **Duration**   -

DataObject and C...

Attribute Name	Data Type
comissionamount	numeric
quantity	numeric
price	numeric

Categories and Contains Cate...

Category	SubCategory of
customer	
day	

Data Save Status   ✕

⚠ **Saved Successfully**

[OK]

Category Attributes

Category	Attribute Name	Data Type
day	day	datetime
customer	address	varchar
customer	name	varchar

[Go Ahead and Save Data]   [Cancel]

Step 1 of the project:

Changing name of **END SEM** button to **Proceed to ROLAP Schema**
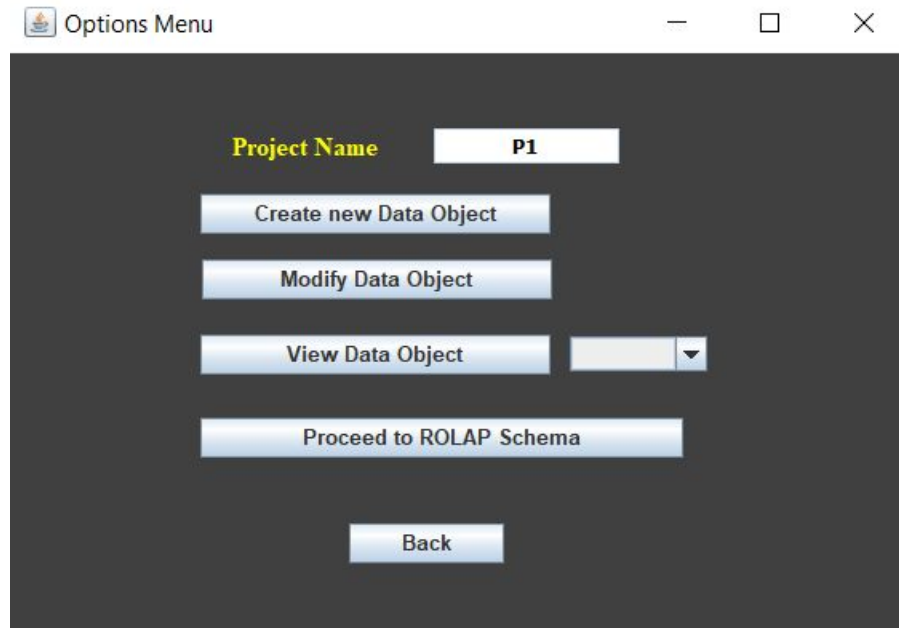
Step 2 Implementation of Conversion Algorithm and saving data in database.

Tables saved in the database after clicking on **Proceed to ROLAP Schema**

	TABLE_CATALOG	TABLE_SCHEMA	TABLE_NAME	TABLE_TYPE
1	P1	dbo	AgreedCommission	BASE TABLE
2	P1	dbo	day	BASE TABLE
3	P1	dbo	vyapari	BASE TABLE
4	P1	dbo	AgreementToSell	BASE TABLE
5	P1	dbo	date	BASE TABLE
6	P1	dbo	BusinessEase	BASE TABLE
7	P1	dbo	CommissionDue	BASE TABLE
8	P1	dbo	customer	BASE TABLE
9	P1	dbo	DailtyAgreement	BASE TABLE
10	P1	dbo	DailyEarning	BASE TABLE
11	P1	dbo	DailySales	BASE TABLE
12	P1	dbo	quality	BASE TABLE
13	P1	dbo	DeliveryTimeAgreement	BASE TABLE
14	P1	dbo	Discardedstock	BASE TABLE
15	P1	dbo	MarketPrice	BASE TABLE
16	P1	dbo	market	BASE TABLE
17	P1	dbo	MarketPrice1	BASE TABLE
18	P1	dbo	Order1	BASE TABLE
19	P1	dbo	Performance	BASE TABLE
20	P1	dbo	agreement	BASE TABLE

```sql
SELECT * FROM INFORMATION_SCHEMA.TABLES WHERE TABLE_NAME LIKE '%%';
```

TABLE_CATALOG	TABLE_SCHEMA	TABLE_NAME	TABLE_TYPE
P1	dbo	agreement	BASE TABLE
P1	dbo	deliverydate	BASE TABLE
P1	dbo	Purchase	BASE TABLE
P1	dbo	product	BASE TABLE
P1	dbo	RequiredReStock	BASE TABLE
P1	dbo	commissionrate	BASE TABLE
P1	dbo	Sale	BASE TABLE
P1	dbo	mode	BASE TABLE
P1	dbo	Sales	BASE TABLE
P1	dbo	StockInHand	BASE TABLE
P1	dbo	StorageCapacity	BASE TABLE
P1	dbo	location	BASE TABLE
P1	dbo	mapping	BASE TABLE
P1	dbo	mapping2	BASE TABLE
P1	dbo	p_info	BASE TABLE
P1	dbo	category_subcategory	BASE TABLE
P1	dbo	infoAttribute	BASE TABLE
P1	dbo	category_attributes	BASE TABLE
P1	dbo	aggregate	BASE TABLE
P1	dbo	aggregate_computed...	BASE TABLE
P1	dbo	aggregate_over_categ...	BASE TABLE

Query executed successfully.

A **mapping table** is created which contains mapping of facts and dimensions

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='mapping';
```

	COLUMN_NAME	DATA_TYPE
1	fact	varchar
2	dimension	varchar

A **mapping2 table** is created which contains mapping of dimension-sub dimension.

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='mapping2';
```

	COLUMN_NAME	DATA_TYPE
1	dimension	varchar
2	subdimension	varchar

Printing Facts and Dimensions in the Console:

```
Problems  @ Javadoc  Declaration  Console ⊠
WelcomeScreen [Java Application] C:\Program Files\Java\jre1.8.0_231\bin\javaw.exe (May 20, 2020, 11:30:58 PM)
jdbc:sqlserver://localhost;database=p1;integratedSecurity=true;
Connecting to database...
connected
Fact:
AgreedCommission (agreedcommissionrate,priceagreed,qualityagreed,quantityagreed)
Dimensions:
day (day)
Dimensions:
vyapari (address,name,telephone)
Fact:
AgreementToSell (commissionrateagrred,priceagreed,qualityagreed,quantityagreed)
Dimensions:
date (date)
Dimensions:
vyapari (address,name,telephone)
Fact:
BusinessEase (easynewprice,easynewquantity,easyqualitychange)
Dimensions:
date (date)
Dimensions:
vyapari (address,name,telephone)
Fact:
CommissionDue (comissionamount,price,quantity)
Dimensions:
customer (address,cid,name,phone)
Dimensions:
day (day)
Fact:
DailtyAgreement (commissionrate,price,quality,quantity)
Dimensions:
day (day)
Dimensions:
vyapari (address,name,telephone)
Fact:
DailyEarning (commissionrate,quantity,sellingrate)
Dimensions:
date (date)
```

```
Problems  @ Javadoc  Declaration  Console ⊠
WelcomeScreen [Java Application] C:\Program Files\Java\jre1.8.0_231\bin\javaw.exe (May 20, 2020, 11:30:58 PM)
Fact:
DailySales (discount,price,quantity)
Dimensions:
date (date)
Dimensions:
quality (qualityrating)
Fact:
DeliveryTimeAgreement (commissionrateagreed,deliveredquality,deliverytimepriceagreed,originalpriceagreed,qualityagreed,quantityagreed)
Dimensions:
date (date)
Dimensions:
vyapari (address,name,telephone)
Fact:
Discardedstock (quantitythrown)
Dimensions:
date (date)
Dimensions:
vyapari (address,name,telephone)
Fact:
MarketPrice (price,priceinmarket,quality,quantityinmarket,quantitysoldinmarket)
Dimensions:
day (day)
Dimensions:
market (name)
Dimensions:
quality (qualityrating)
Fact:
MarketPrice1 (price,quality)
Dimensions:
day (day)
Dimensions:
market (name)
Fact:
Order1 (amount,quantity)
Dimensions:
customer (address,cid,name,phone)
Dimensions:
date (date)
Dimensions:
quality (qualityrating)
Dimensions:
vyapari (address,name,telephone)
```

Fact:
Performance (deliveryleadtime,punctualsupply,qualityagreed,qualitysupplied,quantityagreed,quantitysupplied)
Dimensions:
agreement (id)
Dimensions:
deliverydate (date)
Dimensions:
vyapari (address,name,telephone)
Fact:
Purchase (orderid,quantity,value)
Dimensions:
customer (address,cid,name,phone)
Dimensions:
product (colour,productid,volume,weight)
Fact:
RequiredReStock (cgst,price,qualityrequired,quantityrequired,sgst,storagecost,transportcost)
Dimensions:
commissionrate (ratepercent)
Dimensions:
date (date)
Dimensions:
vyapari (address,name,telephone)
Fact:
Sale (amount,quantity)
Dimensions:
customer (address,cid,name,phone)
Dimensions:
date (date)
Dimensions:
mode (cash,credit)
Dimensions:
quality (qualityrating)
Fact:
Sales (quantity,salesid,value)
Dimensions:
customer (address,cid,name,phone)
Dimensions:
product (colour,productid,volume,weight)

Fact:
StockInHand (totalquantityinhand)
Dimensions:
day (day)
Dimensions:
quality (qualityrating)
Dimensions:
vyapari (address,name,telephone)
Fact:
StorageCapacity (used,vacant)
Dimensions:
date (date)
Dimensions:
location (address)

After clicking on **Proceed to ROLAP Schema** button all the facts and dimensions are tables are created and schemas are stored in the database which is shown below:

Schema of Data Objects

Fact Tables :

1. **Required Restock**

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='RequiredRestock';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	cgst	numeric
3	price	numeric
4	qualityrequired	varchar
5	quantityrequired	numeric
6	sgst	numeric
7	storagecost	numeric
8	transportcost	numeric
9	foreign_key1	varchar
10	foreign_key2	varchar
11	foreign_key3	varchar

2. **Storage Capacity**

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='StorageCapacity';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	used	int
3	vacant	int
4	foreign_key1	varchar
5	foreign_key2	varchar

3. **Market Price**

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='MarketPrice';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	price	numeric
3	priceinmarket	numeric
4	quality	varchar
5	quantityinmarket	numeric
6	quantitysoldinmarket	numeric
7	foreign_key1	varchar
8	foreign_key2	varchar
9	foreign_key3	varchar

4. Agreement to Sell

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='AgreementToSell';
```

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	commissionrateagrred	numeric
3	priceagreed	numeric
4	qualityagreed	varchar
5	quantityagreed	numeric
6	foreign_key1	varchar
7	foreign_key2	varchar

5. Business Ease

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='BusinessEase';
```

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	easynewprice	numeric
3	easynewquantity	numeric
4	easyqualitychange	varchar
5	foreign_key1	varchar
6	foreign_key2	varchar

6. Performance

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='Performance';
```

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	deliveryleadtime	datetime
3	punctualsupply	varchar
4	qualityagreed	varchar
5	qualitysupplied	varchar
6	quantityagreed	numeric
7	quantitysupplied	numeric
8	foreign_key1	varchar
9	foreign_key2	varchar
10	foreign_key3	varchar

7. Delivery Time Agreement

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='DeliveryTimeAgreement';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	commissionrateagreed	numeric
3	deliveredquality	varchar
4	deliverytimepriceagreed	numeric
5	originalpriceagreed	numeric
6	qualityagreed	varchar
7	quantityagreed	numeric
8	foreign_key1	varchar
9	foreign_key2	varchar

8. Daily Agreement

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='DailtyAgreement';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	commissionrate	numeric
3	price	numeric
4	quality	varchar
5	quantity	numeric
6	foreign_key1	varchar
7	foreign_key2	varchar

9. Sale

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='Sale';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	amount	numeric
3	quantity	numeric
4	foreign_key1	varchar
5	foreign_key2	varchar
6	foreign_key3	varchar
7	foreign_key4	varchar

10. Market Price1

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='MarketPrice1';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	price	numeric
3	quality	varchar
4	foreign_key1	varchar
5	foreign_key2	varchar

11. Discarded Stock

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='DiscardedStock';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	quantitythrown	numeric
3	foreign_key1	varchar
4	foreign_key2	varchar

12. Order1

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='Order1';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	amount	numeric
3	quantity	numeric
4	foreign_key1	varchar
5	foreign_key2	varchar
6	foreign_key3	varchar
7	foreign_key4	varchar

13. Stock in hand

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='StockInHand';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	totalquantityinhand	numeric
3	foreign_key1	varchar
4	foreign_key2	varchar
5	foreign_key3	varchar

14. Daily Earning

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='DailyEarning';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	commissionrate	numeric
3	quantity	numeric
4	sellingrate	numeric
5	foreign_key1	varchar

15. Agreed Commission

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='Agreedcommission';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	agreedcommissionrate	numeric
3	priceagreed	numeric
4	qualityagreed	varchar
5	quantityagreed	numeric
6	foreign_key1	varchar
7	foreign_key2	varchar

16. Daily Sales

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='DailySales';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	discount	numeric
3	price	numeric
4	quantity	numeric
5	foreign_key1	varchar
6	foreign_key2	varchar

17. Commission due

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='CommissionDue';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	comissionamount	numeric
3	price	numeric
4	quantity	numeric
5	foreign_key1	varchar
6	foreign_key2	varchar

Schema of Category Objects:

Dimension Tables:

1. Vyapari

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='Vyapari';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	address	varchar
3	name	varchar
4	telephone	numeric

2. Commission Rate

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='CommissionRate';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	ratepercent	numeric

3. Date

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='Date';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	date	datetime

4. Location

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='Location';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	address	varchar

5. Market

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='Market';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	name	varchar

6. Day

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='Day';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	day	datetime

7. Quality

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='Quality';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	qualityrating	numeric

8. Agreement

```
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='Agreement';
```

100 %

Results | Messages

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	id	varchar

9. Delivery Date

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='DeliveryDate';
```

100 %

Results **Messages**

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	date	datetime

10. Customer

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='Customer';
```

100 %

Results **Messages**

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	address	varchar
3	cid	varchar
4	name	varchar
5	phone	numeric

11. Mode

```sql
select COLUMN_NAME,DATA_TYPE from INFORMATION_SCHEMA.COLUMNS where TABLE_NAME='Mode';
```

100 %

Results **Messages**

	COLUMN_NAME	DATA_TYPE
1	primary_key	varchar
2	cash	numeric
3	credit	numeric