



Case Study

on

INFORMATICA

Case study by,

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1. Understandings of Case Study

Btech-Chai-Wala is a start-up company by Vinit and his friends. Now-a-days in the advancement of the Internet and technologies and by considering the peoples locations they decided to start online streaming services instead of the Television. So, they have created the new streaming service which will allows only the beverage related contents.

They started subscriptions like weekly, monthly and Annual. Vinit has played roles in IT sectors like Data Analyst, Enterprise Data Architect, Principal Architect etc.

This case study questions and analysis will help the start-up to investment decisions and new features to improve Btech-Chai-Wala business by using informatica an ETL tool.



2.1 & 2.2 Queries:

-- Creating the database

```
CREATE DATABASE [btech-chai-wala];
```

-- Using the btech-chai-wala database

```
USE [btech-chai-wala];
```

-- Creating tables plans, subscriptions and customer

-- Creating plans table

```
CREATE TABLE [dbo].[plans]
(
    plan_id INT NOT NULL PRIMARY KEY IDENTITY(1,1),
    plan_name VARCHAR(100),
    plan_price DECIMAL
);
```

-- Creating subscriptions table

```
CREATE TABLE [dbo].[subscriptions]
(
    subscrip_id INT NOT NULL PRIMARY KEY IDENTITY(1,1),
    cust_id INT,
    plan_id INT,
    start_date DATE,
    is_active VARCHAR(1)
);
```

-- Creating customer table



```
CREATE TABLE [dbo].[customer]
```

```
(  
    cust_id INT NOT NULL PRIMARY KEY IDENTITY(1,1),  
    cust_name VARCHAR(100),  
    cust_city VARCHAR(100),  
    cust_dob DATE  
);
```

-- Inserting the values into the plans, subscriptions and customer tables

--plans values

```
SET IDENTITY_INSERT [dbo].[plans] ON;
```

```
INSERT INTO [dbo].[plans](plan_id,plan_name,plan_price) VALUES(1,'Trail',0.00);  
INSERT INTO [dbo].[plans](plan_id,plan_name,plan_price) VALUES(2,'Basic_Monthly',499.00);  
INSERT INTO [dbo].[plans](plan_id,plan_name,plan_price) VALUES(3,'Pro_Monthly',999.00);  
INSERT INTO [dbo].[plans](plan_id,plan_name,plan_price) VALUES(4,'Pro_Annual',11998.00);  
INSERT INTO [dbo].[plans](plan_id,plan_name,plan_price) VALUES(5,'Chrun',NULL);  
SET IDENTITY_INSERT [dbo].[plans] OFF;
```

-- subscriptions values

```
SET IDENTITY_INSERT [dbo].[subscriptions] ON;  
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)  
VALUES(1,1,2,'2019-08-01',0);  
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)  
VALUES(2,1,3,'2019-08-08',0);  
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)  
VALUES(3,5,1,'2020-01-17',0);  
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)  
VALUES(4,5,1,'2020-03-17',0);  
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)  
VALUES(5,5,3,'2021-03-24',0);  
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)  
VALUES(6,5,3,'2021-03-24',0);
```



```
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(7,5,5,'2021-04-29',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(8,5,5,'2022-04-30',1);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(9,6,1,'2020-05-31',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(10,6,2,'2020-06-07',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(11,9,1,'2020-06-22',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(12,9,3,'2020-06-29',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(13,8,1,'2020-07-06',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(14,8,3,'2020-07-13',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(15,7,1,'2020-08-01',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(16,1,1,'2020-08-07',1);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(17,7,2,'2020-08-08',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(18,9,4,'2020-08-29',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(19,2,1,'2020-09-20',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(20,2,1,'2020-09-20',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(21,2,4,'2020-09-27',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(22,2,4,'2020-09-27',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(23,6,4,'2020-10-21',0);
```



```
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(24,2,1,'2020-11-19',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(25,10,1,'2020-11-19',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(26,2,5,'2020-11-26',1);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(27,10,5,'2021-11-26',1);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(28,3,1,'2020-12-15',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(29,3,1,'2020-12-15',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(30,3,2,'2020-12-22',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(31,4,2,'2020-12-22',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(32,4,3,'2021-03-29',1);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(33,3,3,'2021-03-29',1);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(34,6,1,'2021-05-31',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(35,6,2,'2021-06-07',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(36,9,1,'2021-06-22',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(37,9,3,'2021-06-29',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(38,8,1,'2021-07-06',0);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(39,8,3,'2021-07-13',1);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(40,7,1,'2021-08-01',1);
```



```
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(41,9,4,'2022-08-29',1);
INSERT INTO [dbo].[subscriptions](subscrip_id, cust_id, plan_id, start_date, is_active)
VALUES(42,6,4,'2021-10-21',1);
SET IDENTITY_INSERT [dbo].[subscriptions] OFF;
-- customer values
SET IDENTITY_INSERT [dbo].[customer] ON;
INSERT INTO [dbo].[customer](cust_id, cust_name, cust_city, cust_dob)
VALUES(1,'Chaitanya','Bangalore', '2001-02-02');
INSERT INTO [dbo].[customer](cust_id, cust_name, cust_city, cust_dob) VALUES(2,'Harini','Mumbai',
'2001-07-19' );
INSERT INTO [dbo].[customer](cust_id, cust_name, cust_city, cust_dob) VALUES(3,'Indu','Chennai',
'2001-01-21');
INSERT INTO [dbo].[customer](cust_id, cust_name, cust_city, cust_dob)
VALUES(4,'Jameela','Hyderabad', '2002-05-01');
INSERT INTO [dbo].[customer](cust_id, cust_name, cust_city, cust_dob)
VALUES(5,'Neeha','Bangalore', '2000-03-15');
INSERT INTO [dbo].[customer](cust_id, cust_name, cust_city, cust_dob)
VALUES(6,'Reshma','Mumbai', '2001-02-02');
INSERT INTO [dbo].[customer](cust_id, cust_name, cust_city, cust_dob) VALUES(7,'Sahithi','Chennai',
'2000-11-02');
INSERT INTO [dbo].[customer](cust_id, cust_name, cust_city, cust_dob)
VALUES(8,'Sharmila','Hyderabad', '2001-04-22');
INSERT INTO [dbo].[customer](cust_id, cust_name, cust_city, cust_dob)
VALUES(9,'Sreelakshmi','Bangalore', '2000-06-17');
INSERT INTO [dbo].[customer](cust_id, cust_name, cust_city, cust_dob)
VALUES(10,'Subasri','Mumbai', '2002-01-30');
SET IDENTITY_INSERT [dbo].[customer] OFF;
-- Verifying the values inserted properly
SELECT * FROM [dbo].[plans];
SELECT * FROM [dbo].[subscriptions];
SELECT * FROM [dbo].[customer];
```



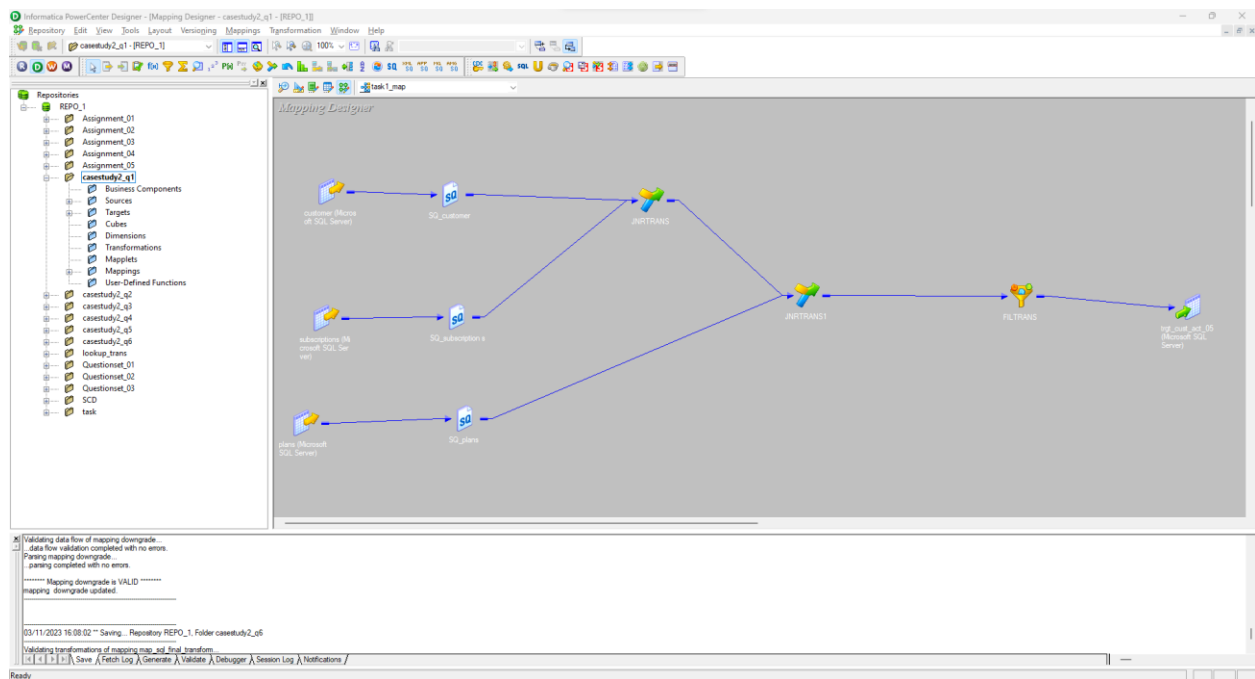



3. Case Study Questions

3.1 Question 1

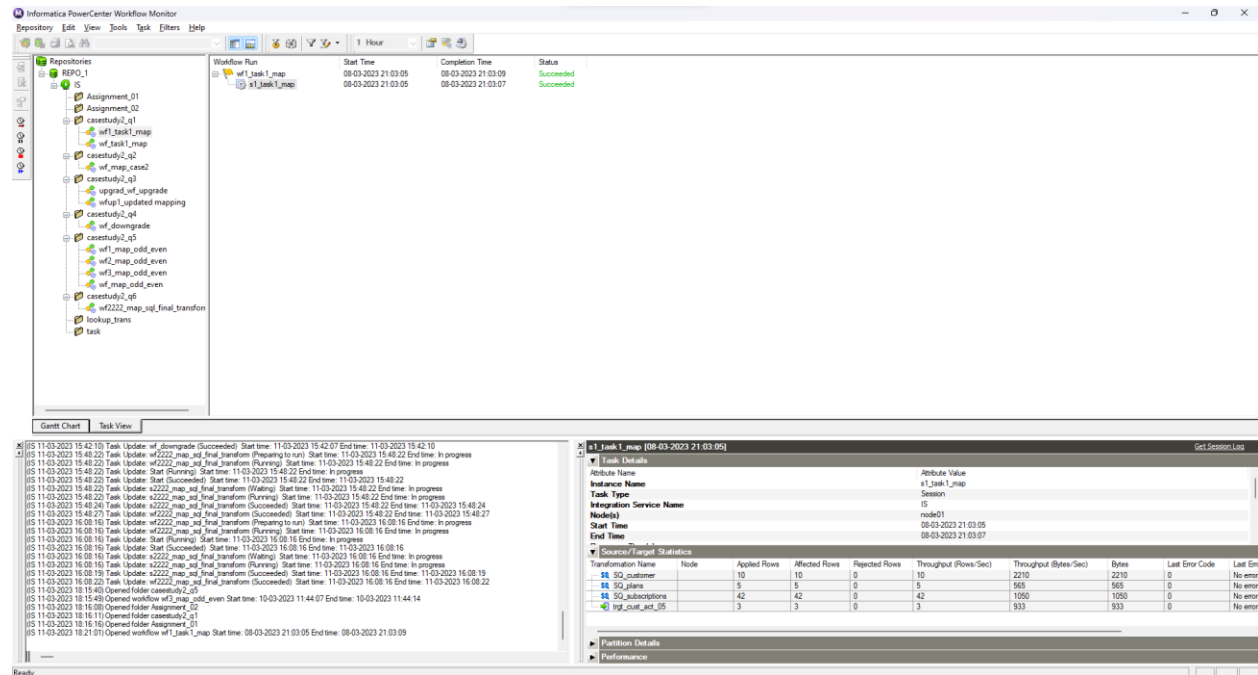
Design Job in Informatica to find how many customers of BTech-Chai-Wala have activate subscription as on 5th May 20 21?

Mappings:

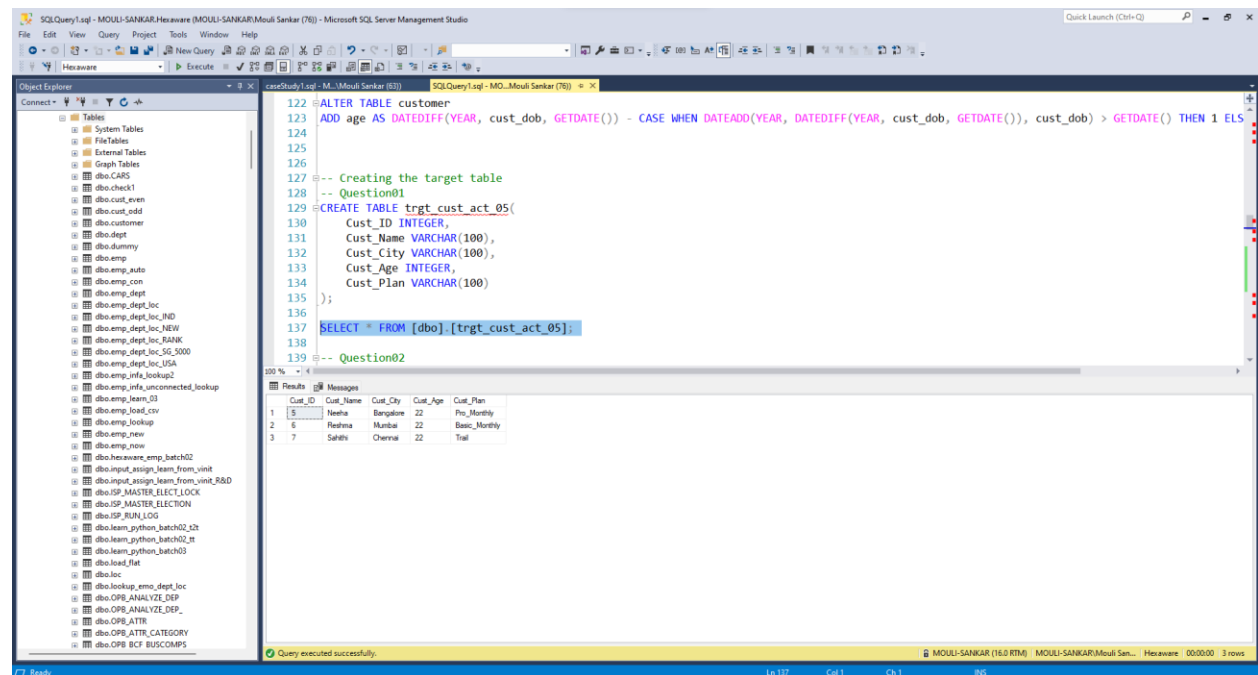




Workflows with run properties:



Database output:

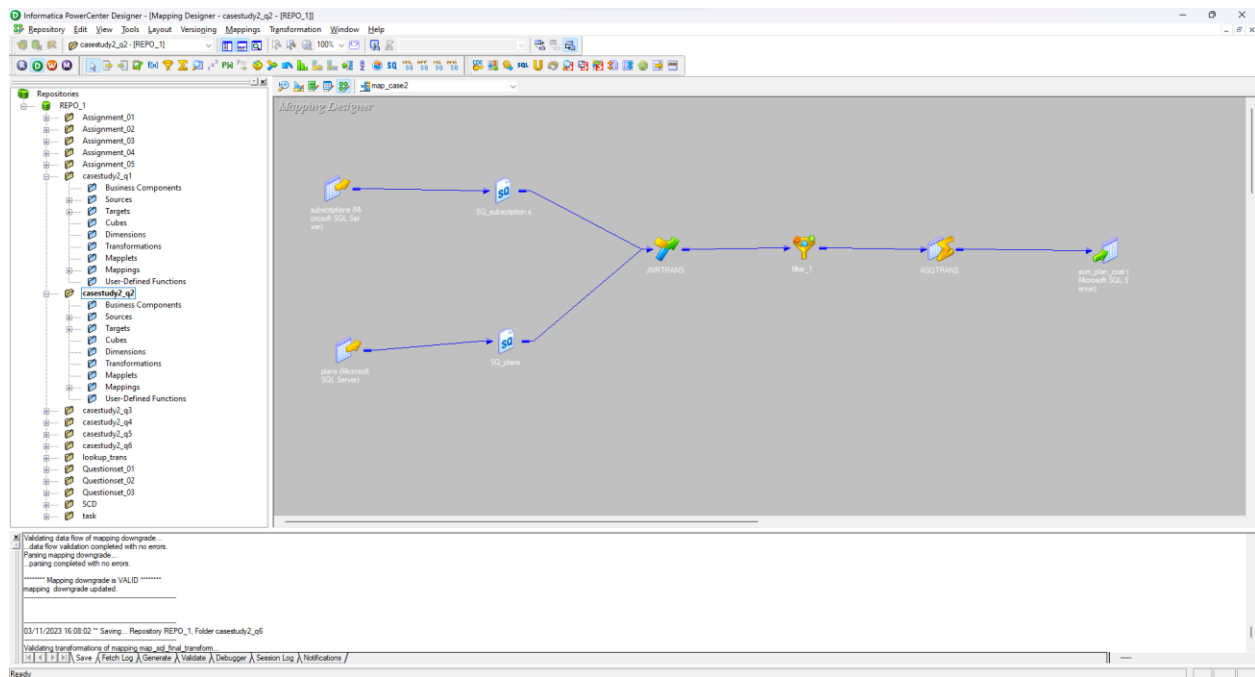


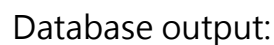
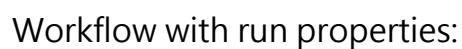


3.2 Question 2

Design Job in Informatica so that sum of customer' s payment for all 4 the plan_name values at 2020-12-31 can be summarized?

Mappings:



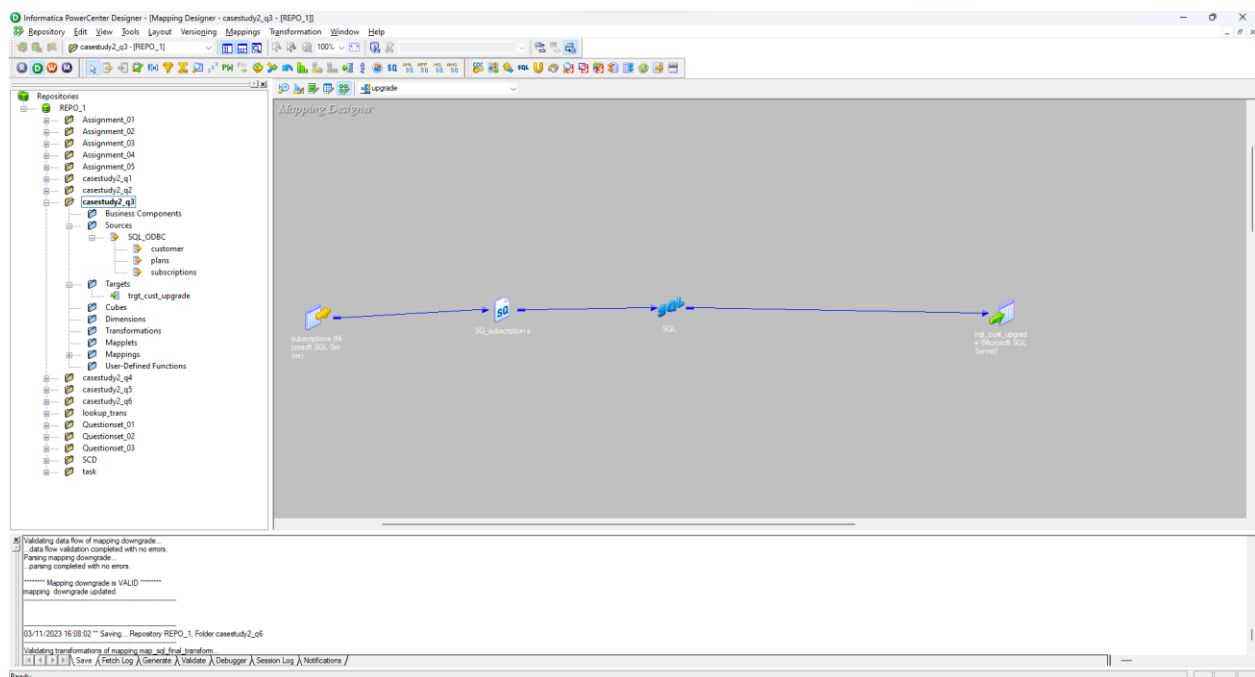


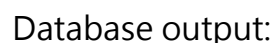
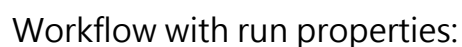


3.3 Question 3

Design Job in Informatica to find how many customers upgraded annual plan between 2020 and 2021?

Mappings:



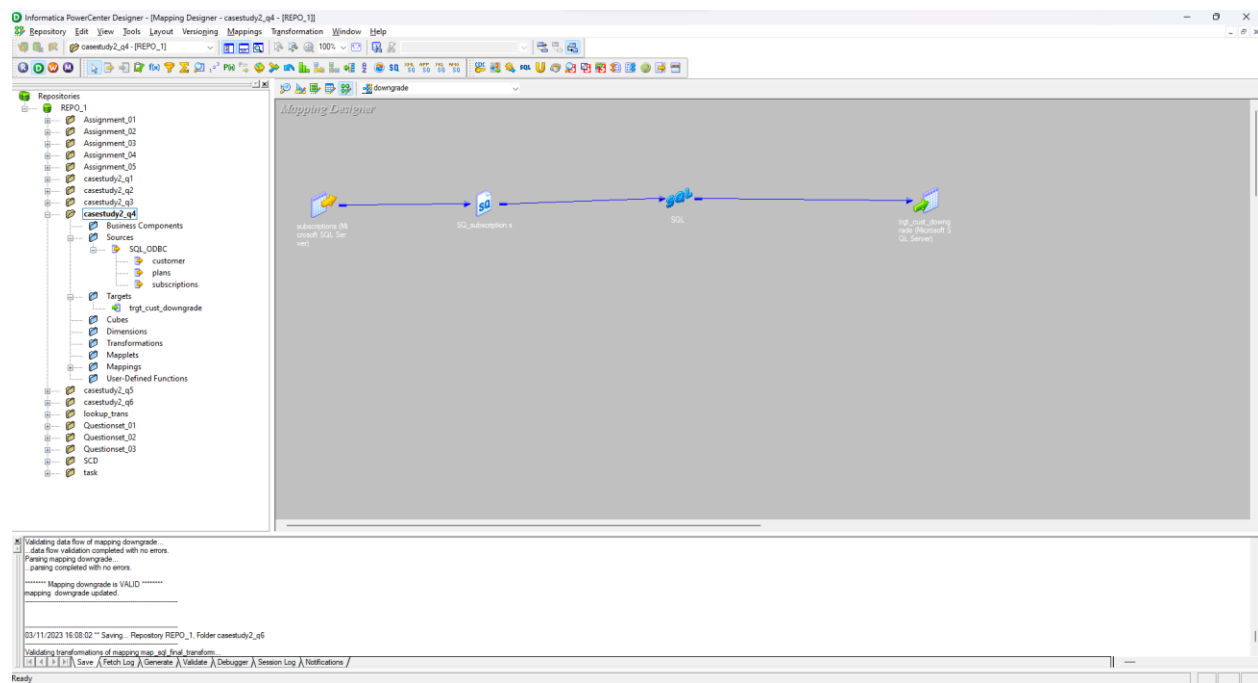




3.4 Question 4

Design Job in Informatica to find how many customers downgraded from a pro monthly to a basic monthly plan in 2020 or 2021?

Mappings:





Workflow with run properties

The screenshot displays the Informatica PowerCenter Workflow Monitor interface. The left pane shows a tree view of the workflow hierarchy, including tasks like 'wf_downgrade', 'wf_task1_map', 'wf_task2_map', 'wf_map_case2', 'wf_map_case3', 'wf_map_case4', 'wf_map_case5', 'wf_map_case6', 'wf_map_case7', 'wf_map_case8', 'wf_map_case9', 'wf_map_case10', 'wf_map_case11', 'wf_map_case12', 'wf_map_case13', 'wf_map_case14', 'wf_map_case15', 'wf_map_case16', 'wf_map_case17', 'wf_map_case18', 'wf_map_case19', 'wf_map_case20', 'wf_map_case21', 'wf_map_case22', 'wf_map_case23', 'wf_map_case24', 'wf_map_case25', 'wf_map_case26', 'wf_map_case27', 'wf_map_case28', 'wf_map_case29', 'wf_map_case30', 'wf_map_case31', 'wf_map_case32', 'wf_map_case33', 'wf_map_case34', 'wf_map_case35', 'wf_map_case36', 'wf_map_case37', 'wf_map_case38', 'wf_map_case39', 'wf_map_case40', 'wf_map_case41', 'wf_map_case42', 'wf_map_case43', 'wf_map_case44', 'wf_map_case45', 'wf_map_case46', 'wf_map_case47', 'wf_map_case48', 'wf_map_case49', 'wf_map_case50', 'wf_map_case51', 'wf_map_case52', 'wf_map_case53', 'wf_map_case54', 'wf_map_case55', 'wf_map_case56', 'wf_map_case57', 'wf_map_case58', 'wf_map_case59', 'wf_map_case60', 'wf_map_case61', 'wf_map_case62', 'wf_map_case63', 'wf_map_case64', 'wf_map_case65', 'wf_map_case66', 'wf_map_case67', 'wf_map_case68', 'wf_map_case69', 'wf_map_case70', 'wf_map_case71', 'wf_map_case72', 'wf_map_case73', 'wf_map_case74', 'wf_map_case75', 'wf_map_case76', 'wf_map_case77', 'wf_map_case78', 'wf_map_case79', 'wf_map_case80', 'wf_map_case81', 'wf_map_case82', 'wf_map_case83', 'wf_map_case84', 'wf_map_case85', 'wf_map_case86', 'wf_map_case87', 'wf_map_case88', 'wf_map_case89', 'wf_map_case90', 'wf_map_case91', 'wf_map_case92', 'wf_map_case93', 'wf_map_case94', 'wf_map_case95', 'wf_map_case96', 'wf_map_case97', 'wf_map_case98', 'wf_map_case99', 'wf_map_case100'. The right pane shows the 'Workflow Run' details for the 'wf_downgrade' task, including the start time, completion time, and status. The status is 'Failed'.

Task Name	Start Time	Completion Time	Status
wf_downgrade	11-03-2023 15:42:07	11-03-2023 15:42:10	Succeeded
wf_downgrade	11-03-2023 15:42:07	11-03-2023 15:42:09	Succeeded
wf_downgrade	11-03-2023 15:41:36	11-03-2023 15:41:38	Succeeded
wf_downgrade	11-03-2023 15:36:27	11-03-2023 15:36:32	Succeeded
wf_downgrade	11-03-2023 15:36:27	11-03-2023 15:36:31	Failed

Database output:

The screenshot displays the Microsoft SQL Server Management Studio interface. The left pane shows the 'Object Explorer' with the 'dbo' schema selected. The right pane shows the 'Query Results' tab, displaying the output of a query. The query is a SELECT statement that filters data from the 'cust_event' table based on the 'plan_name' and 'plan_id' columns. The results show a single row with the following values: 'cust_id', 'cust_name', 'cust_city', 'cust_age', 'cust_plan', 'cust_current_plan'.

```
200 p2.plan_name AS cust_previous_plan
201 FROM plan_downgrade pd
202 INNER JOIN [dbo].[plans] p ON pd.plan_id = p.plan_id AND p.plan_name = 'Pro Monthly'
203 INNER JOIN [dbo].[plans] p2 ON pd.down_plan = p2.plan_id AND p2.plan_name = 'Basic'
204 INNER JOIN customer_info ci ON pd.cust_id = ci.cust_id
205 ORDER BY pd.cust_id;
206
207
208
209
210
211
212 SELECT * FROM trg_cust_downgrade;
213
214
215 -- Question 05
216
217 CREATE TABLE [dbo].[cust_event]
```

Cust_ID	Cust_Name	Cust_City	Cust_Age	Cust_Plan	Cust_Current_Plan

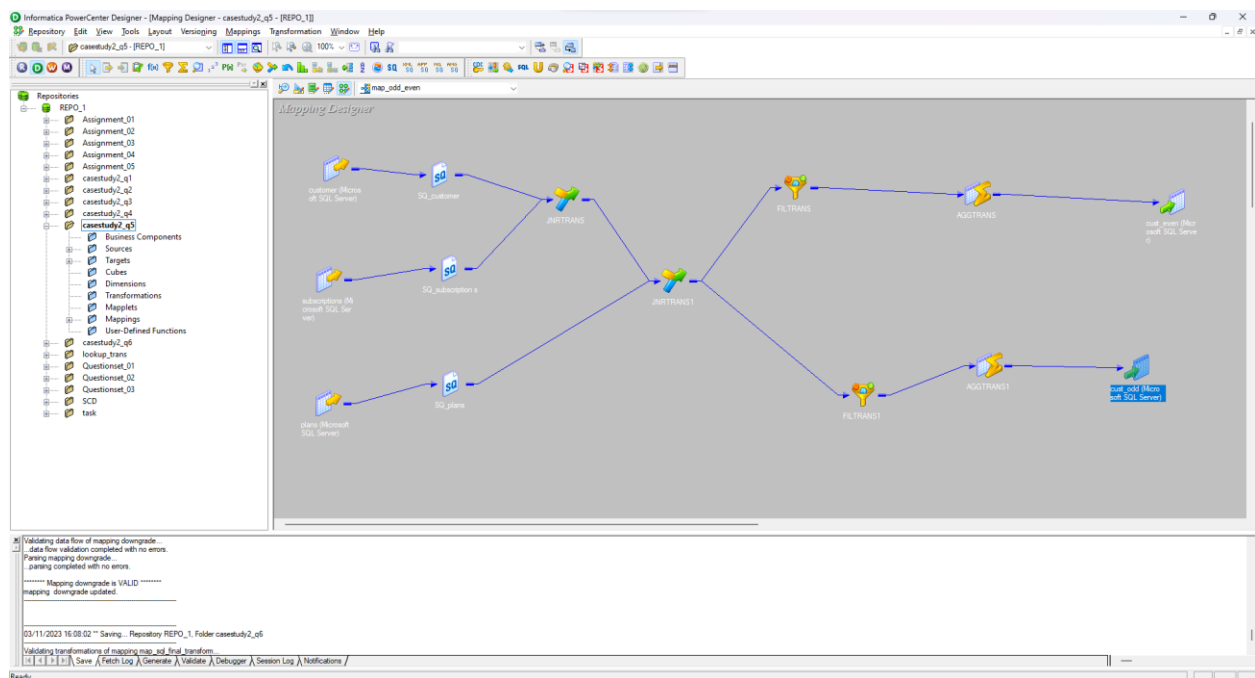
Note: No person in the given data is downgraded.

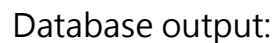
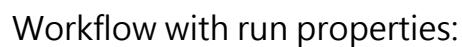


3.5 Question 5

Design Job in Informatica so that Customer with even age (like 18, 20, 22, 24 etc.) goes in even table and odd ages (like 17, 19, 21, 23 etc.) goes in odd table. Age will compute on the day of job run.

Mappings:







3.6 Question 6

Design a job in Informatica so that you get output, which summarize earning in year 2020, 2021, 2022 for each plan.

Mappings:

