

Project Deliverable 4

1. Procedure 1– Insert a New Payment

```
1  -- PROCEDURE 1
2  -- DROP PROCEDURE InsertNewPayment
3  CREATE PROCEDURE InsertNewPayment
4  (
5
6      @payment_amount DECIMAL(4,1),
7      @payment_status VARCHAR(7),
8      @order_time DATE
9  )
10 AS
11 BEGIN
12     INSERT INTO PAYMENT (payment_amount,payment_status, order_time)
13     VALUES (@payment_amount,@payment_status, @order_time);
14 END;
15
16
17 EXEC InsertNewPayment 101.5, 'success', '2024-03-02'
18
19 select * from Payment
```

payment_id	payment_amount	payment_status	order_time
29	73.0	failure	2023-07-11
30	85.9	success	2023-09-09
31	71.1	success	2023-06-18
32	49.7	success	2023-07-05
33	49.8	success	2023-08-28
34	70.6	success	2023-03-06
35	74.9	success	2023-02-19
36	2.7	success	2023-03-16
37	2.0	success	2023-09-29
38	32.9	success	2023-06-30
39	10.4	success	2023-07-14
40	71.7	success	2023-08-14
41	101.5	success	2024-03-02

2. Procedure 2 – Insert a New Review

```
43 COMMIT TRANSACTION;
44 END TRY
45 BEGIN CATCH
46     BEGIN
47         ROLLBACK TRANSACTION;
48     END
49 END CATCH;
50 END;
51
52 EXEC InsertNewReview 12,10,'The food was amazing', '03-03-2024'
53
54 select * from Review
55
```

review_id	customer_id	restaurant_id	review_text	review_date	rating	review_year
26	11	6	unclean environment	2023-11-22	5	2023
27	8	12	delectable dishes	2023-05-27	3	2023
28	15	9	cramped seating	2023-06-08	1	2023
29	1	2	a forgettable dining disappointment. Inconsistent qu...	2024-02-11	2	2024
30	5	7	poor hygiene	2023-08-26	4	2023
31	5	15	Poor service	2023-06-01	5	2023
32	8	14	impeccable service	2023-11-27	1	2023
33	8	1	a haven for food enthusiasts. Unforgettable tastes	2023-02-28	2	2023
34	5	3	a must-visit for food connoisseurs. Exceptional servi...	2023-10-14	2	2023
35	8	1	regrettable dining choice altogether. Unappetizing ...	2023-06-01	1	2023
36	11	6	Poor service	2024-01-09	2	2024
37	13	1	a must-visit for food connoisseurs. Exceptional servi...	2024-01-13	2	2024
38	15	14	tasteless meals	2023-11-28	4	2023
39	8	13	an experience best forgotten.	2023-08-14	4	2023
40	10	8	a culinary gem worth savoring. Warm ambiance	2023-09-07	4	2023
41	10	12	The food was amazing	2024-03-03	5	2024
42	10	8	Great food. Friendly staff	2024-03-03	4	2024

3. Complex Query 1 – Top 10 Popular food item names that were ordered at a restaurant.

```
57 -- COMPLEX QUERY 1
58 -- TOP 10 Popular food item names that were ordered at a restaurant.
59
60 WITH CTE AS (select food_item_id, food_item_name from food_items),
61 CTE2 AS (select food_item_id, sum(quantity) quantity
62 from ordered_food
63 group by food_item_id)
64
65 SELECT TOP(10) CTE.food_item_name, CTE2.quantity
66 FROM CTE JOIN CTE2
67 ON CTE.food_item_id = CTE2.food_item_id
68 order by CTE2.quantity desc
```

Results

	food_item_name	quantity
1	Shezwan Fried Rice	40
2	Mango Ice Cream	37
3	Fruit Salad	24
4	Chicken Wings	23
5	Cheese Pizza	23
6	Paneer Burger	21
7	Mushroom Soup	20
8	White Sauce Pasta	17
9	Fried rice Burrito	11
10	Chocolate Ice Cream	8

4. Complex Query 2 – Orders with “failure” status in the payment and the customer name with the time at which it was ordered.

```
71 -- COMPLEX QUERY 2
72 -- Orders with 'failure' status in the payment and the customer name with the time at which it was
73 -- ordered.
74 WITH CTE AS (select payment_id, payment_status from Payment where payment_status = 'failure'),
75 CTE2 AS (select order_id, payment_id, customer_id, order_time from Orders),
76 CTE3 AS (select customer_id, customer_name from Customer)
77
78 SELECT CTE3.customer_name, CTE2.order_time
79 FROM CTE
80 JOIN CTE2 ON CTE.payment_id = CTE2.payment_id
81 JOIN CTE3 ON CTE2.customer_id = CTE3.customer_id
82
```

Results

	customer_name	order_time
1	Astrix Bernaldez	2023-11-10
2	Bran Hagston	2024-02-09
3	Skipper Casham	2023-09-05

5. Computation Query 1 – Computing YEAR from the review date

```

84  -- COMPUTATIONAL QUERY 1
85  -- Computing YEAR from Review Date
86
87  ALTER TABLE Review
88  ADD rating INT
89  CONSTRAINT CHKRating CHECK (Rating>=1 AND Rating<=5)
90
91  Select * from Review
92
93  ALTER TABLE Review
94  ADD review_year
95  as (YEAR(review_date))
96

```

review_id	customer_id	restaurant_id	review_text	review_date	rating	review_year
1	9	8	a hidden culinary treasure. Friendly staff	2023-07-02	5	2023
2	5	12	bland food	2023-11-04	5	2023
3	8	5	inviting atmosphere	2023-12-02	5	2023
4	14	15	a delightful dining spot to discover. Authentic cuisine	2023-12-16	3	2023
5	11	2	inviting atmosphere	2023-09-22	4	2023
6	15	13	a letdown in every aspect. Limited menu	2023-08-07	5	2023
7	10	6	inviting atmosphere	2023-10-14	3	2023
8	9	5	cozy setting	2023-05-15	5	2023
9	15	2	a subpar dining destination. Uninspired cuisine	2023-04-12	1	2023
10	2	10	cramped seating	2023-09-26	3	2023
11	6	3	lackluster atmosphere	2023-09-17	5	2023
12	3	3	a memorable dining experience guaranteed. Innov...	2023-11-25	1	2023
13	15	11	a complete letdown for food lovers. Unwelcoming st...	2023-12-16	4	2023
14	8	7	regrettable dining choice altogether. Unappetizing ...	2023-10-03	4	2023
15	13	2	Exquisite flavors	2023-10-15	3	2023
16	15	8	a must-visit for food connoisseurs. Exceptional servi...	2023-04-02	5	2023
17	2	5	cramped seating	2023-10-01	1	2023
18	11	3	welcoming vibe	2023-11-21	4	2023
19	11	9	a memorable dining experience guaranteed. Innov...	2023-09-12	2	2023
20	2	11	a forgettable dining disappointment. Inconsistent qu...	2023-02-25	2	2023
21	3	6	noisy atmosphere	2023-05-01	1	2023
22	9	8	a delightful dining spot to discover. Authentic cuisine	2023-04-17	4	2023
23	12	11	a culinary adventure awaits here. Gastronomic deliq...	2023-04-28	3	2023

6. Computation Query 2 – Compute Mailing Address from the name and the employee address

```

97  -- COMPUTATIONAL QUERY 2
98
99  Select * from Employee
100
101  ALTER TABLE Employee
102  ADD employee_address VARCHAR(200)
103
104  -- Computing Mailing address using employee name and address
105
106  ALTER TABLE Employee
107  ADD mailing_address
108  as (concat(employee_name, ', ', employee_address))
109

```

employee_id	employee_name	employee_email	employee_phone	employee_address	mailing_address
1	Roselle Malipant	rmalipant0@cpanel.net	5862856622	123 Oak Street, Apartment 101, California, Los Ang...	Roselle Malipant, 123 Oak Street, Apartment 101, ...
2	Dorelia Heinzler	dheinzler1@craigslist.org	2733904489	456 Maple Avenue, Unit 202, New York, Brooklyn	Dorelia Heinzler, 456 Maple Avenue, Unit 202, New ...
3	Lillian Boothesstone	lboothesstone2@webs.com	3425867900	789 Pine Road, Suite 303, Texas, Houston	Lillian Boothesstone, 789 Pine Road, Suite 303, Tex...
4	Emanuele Renn	erenn3@pbs.org	2737441138	101 Elm Court, Flat 404, Florida, Miami	Emanuele Renn, 101 Elm Court, Flat 404, Florida, M...
5	Clementia Lillico	clillico4@linkedin.com	9308356900	222 Birch Lane, Apartment 505, Illinois, Chicago	Clementia Lillico, 222 Birch Lane, Apartment 505, Illi...
6	Panchito Gerrens	pgerrens5@smh.com.au	4953927530	333 Cedar Street, Unit 606, Washington, Seattle	Panchito Gerrens, 333 Cedar Street, Unit 606, Washi...
7	Donia Piff	dpiff6@freewebs.com	8663346817	444 Walnut Avenue, Suite 707, Massachusetts, Bos...	Donia Piff, 444 Walnut Avenue, Suite 707, Massachu...
8	Coralyn Longhorn	clonghorn7@time.com	8814257561	555 Willow Drive, Apartment 808, Nevada, Las Vegas	Coralyn Longhorn, 555 Willow Drive, Apartment 808...
9	Hartwell Hutchin	hhutchin8@vkontakte.ru	5972755001	666 Spruce Circle, Flat 909, Colorado, Denver	Hartwell Hutchin, 666 Spruce Circle, Flat 909, Colora...
10	Lurette Shorten	lshorten9@hp.com	2965412179	777 Ash Terrace, Unit 1010, Arizona, Phoenix	Lurette Shorten, 777 Ash Terrace, Unit 1010, Arizon...
11	Lars Pagon	lpagona@about.com	8017665038	888 Sycamore Place, Suite 1111, Georgia, Atlanta	Lars Pagon, 888 Sycamore Place, Suite 1111, Geor...
12	Lyell Sigge	lsigge@meettup.com	3856182841	999 Pineapple Street, Apartment 1212, Oregon, Por...	Lyell Sigge, 999 Pineapple Street, Apartment 1212, ...
13	Kain McKibbin	kmckibbin@freewebs.com	2418789051	1212 Peach Avenue, Flat 1313, Pennsylvania, Phila...	Kain McKibbin, 1212 Peach Avenue, Flat 1313, Pen...
14	Joshuah Geddis	jgeddis@discovery.com	5736643672	1313 Cherry Lane, Unit 1414, Michigan, Detroit	Joshuah Geddis, 1313 Cherry Lane, Unit 1414, Mich...
15	Tiffany Zecchi	tzecchi@latimes.com	4603008655	1414 Lemon Boulevard, Suite 1515, Ohio, Columbus	Tiffany Zecchi, 1414 Lemon Boulevard, Suite 1515, ...

7. Trigger 1 – Created a trigger to increase the count in total_review column of the restaurant table which is triggered when a review is added in the review table.

```

110  --TRIGGER 1
111  CREATE TRIGGER InsertReview ON REVIEW
112  AFTER INSERT AS
113  BEGIN
114      MERGE restuarant
115      USING (select restuarant_id, count(restuarant_id) from review group by restuarant_id)
116      AS pairs(id2, data2)
117      ON restuarant_id = id2
118      WHEN MATCHED
119      THEN UPDATE SET total_review = data2;
120  END;
121
122  SELECT * FROM REVIEW
123  SELECT * FROM RESTUARANT
124
125  Insert into Review (customer_id, restuarant_id, review text, review date, rating) values (10, 8,
126  'Great food. Friendly staff', '2024-03-03 03:18:13',4);

```

Results Messages

restaurant_id	restaurant_name	restaurant_phone	total_review
1	The Hungry Bear	7574324942	4
2	Cafe Delight	7758223174	4
3	The Savory Spoon	6654639998	4
4	Bistro Bliss	5395108010	NULL
5	The Rustic Fork	5725366123	3
6	Gourmet Junction	2245577411	4
7	The Tasty Palette	8147711041	2
8	Foodie Haven	9583988269	5
9	The Flavorful Bite	2619091975	2
10	Dine Divine	6904096738	1
11	The Culinary Corner	2203433710	3
12	Taste Temptations	9555907184	3
13	The Epicurean Experience	4595614601	2
14	Savor Sensations	6226701377	3

8. Trigger 2 – When a food item is ordered it is removed from the inventory and hence food_item_quantity will be decreased when the trigger runs.

```

128  -- TRIGGER 2
129  --drop trigger UpdateInventory
130
131  CREATE TRIGGER UpdateInventory ON ORDERED_FOOD
132  AFTER INSERT AS
133  BEGIN
134      DECLARE @quantity INT
135      SELECT @quantity = INSERTED.quantity
136      FROM INSERTED
137      UPDATE INVENTORY
138      SET food_item_quantity = food_item_quantity - @quantity
139  END;
140
141
142  SELECT * FROM INVENTORY
143  SELECT * FROM ORDERED_FOOD
144
145  insert into Ordered_Food (order_id, food_item_id, instructions, quantity) values (1, 3, null , 1);

```

Results Messages

inventory_id	food_item_id	food_item_quantity
1	3	27
2	5	76
3	10	2
4	6	53
5	8	36
6	1	30
7	15	0
8	1	70
9	7	85
10	4	64