

KAFKA - ASSIGNMENT

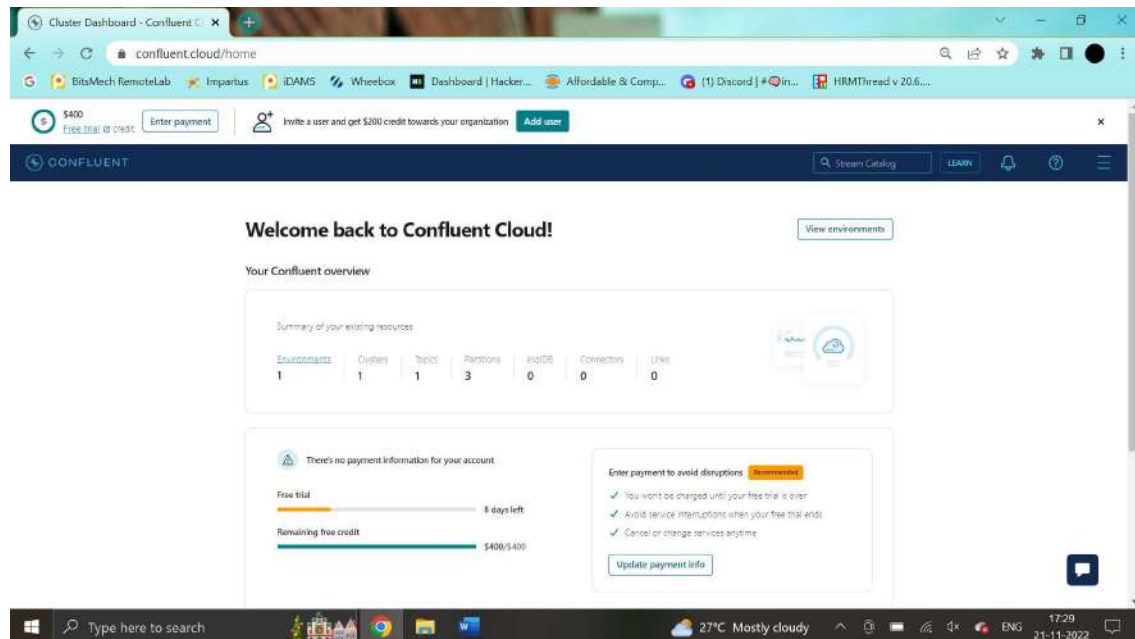
download restaurant data from below mentioned link

Download Data Link -> https://github.com/shashank-mishra219/Confluent-Kafka-Setup/blob/main/restaurant_orders.csv

Complete the given below task to finish this assignment.

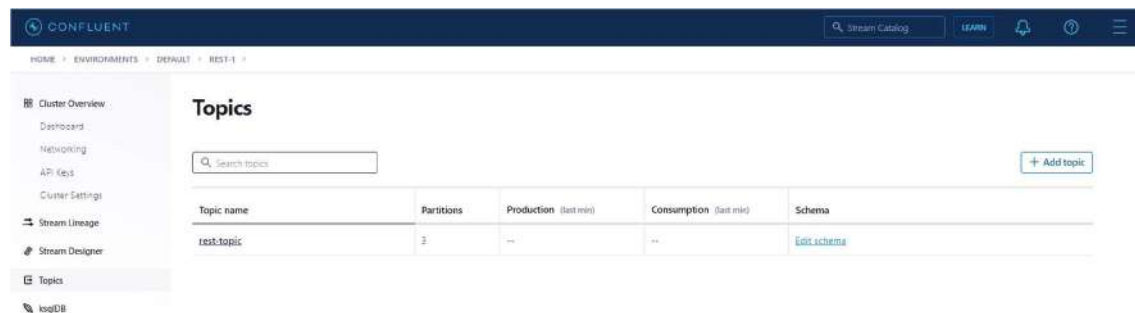
1. Setup Confluent Kafka Account

Confluent cloud account home page



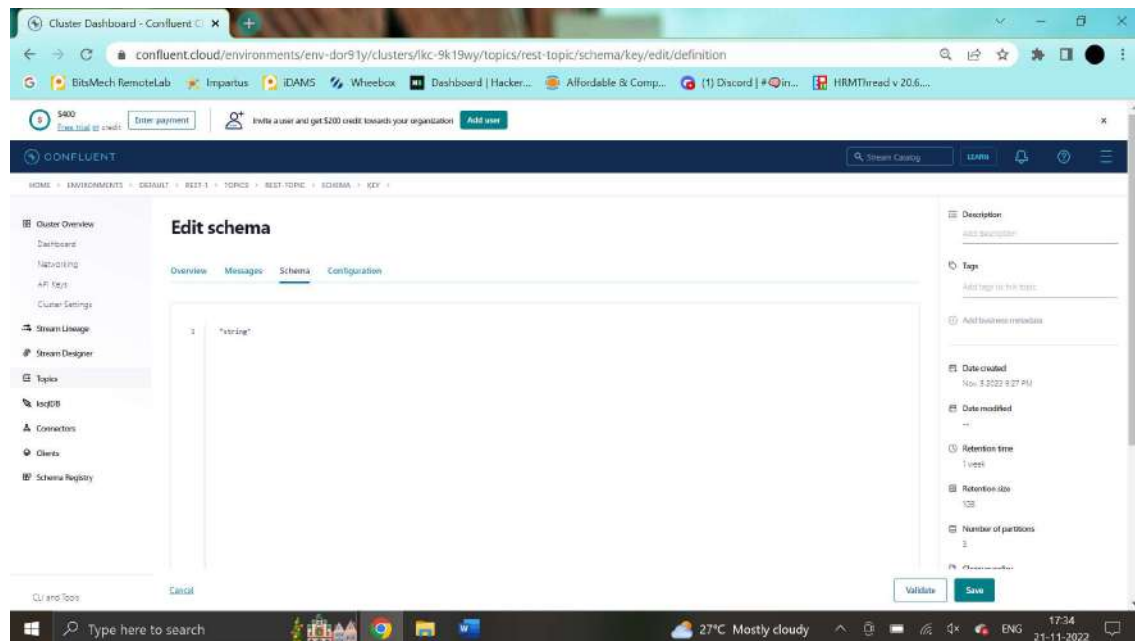
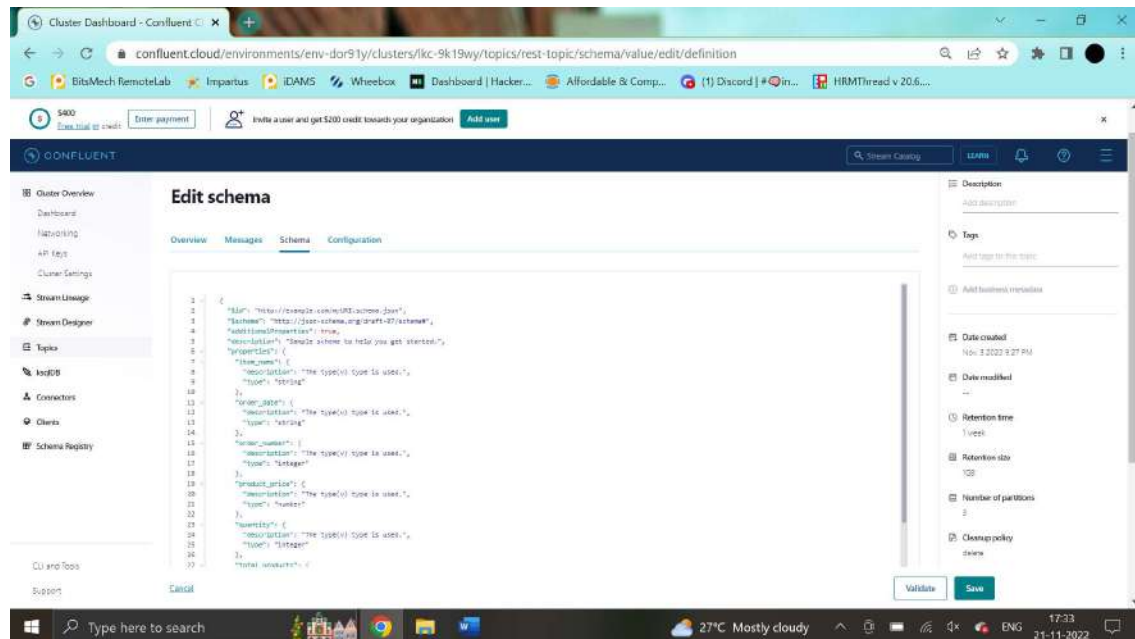
2. Create one kafka topic named as "restaurent-take-away-data" with 3 partitions

Created topic named with "rest-topic" with 3 partitions



3. Setup key (string) & value (json) schema in the confluent schema registry

Schema setup done using key as string and values as json with in confluent schema registry



4. Write a kafka producer program (python or any other language) to read data records from restaurent data csv file,

make sure schema is not hardcoded in the producer code, read the latest version of schema and schema_str from schema registry and use it for data serialization.

Reading CSV data

```
80
81
82 def get_order_instance(file_path):
83     df=pd.read_csv(file_path)
84     orders=list(Order)-[]
85     for data in df.values:
86         order=order(dict(zip(columns,data)))
87         orders.append(order)
88     yield order
```

Reading schema from Schema registry

```
120
121 def main(topic):
122
123     schema_registry_conf = schema_conf()
124     schema_registry_client = SchemaregistryClient(schema_registry_conf)
125     schema_str = schema_registry_client.get_latest_version('rest-topic-value').schema.schema_str
126     string_serializer = StringSerializer('utf-8')
127     json_serializer = JsonSerializer(schema_str, schema_registry_client, order_to_dict)
128
129     producer = Producer(sasl_conf())
130
131     print("Producing user records to topic {}, ^C to exit:".format(topic))
132     while True:
133         # Serve on_delivery callbacks from previous calls to produce()
134         producer.poll(0.0)
135         try:
136             for order in get_order_instance(file_path=FILE_PATH):
```

Click link for Complete producer code - [Link](#)

Producing messages to topic

```

C:\Users\DELL_ Command Prompt
user record b'6c84abed-968c-4399-8940-cd7214ebc415' successfully produced to rest-topic [1] at offset 113623
user record b'2c377a32-5042-4bf1-9d05-f9a2b0a34e4' successfully produced to rest-topic [0] at offset 112949
user record b'79423400-0765-4a8a-af3a-8a21dfc057b' successfully produced to rest-topic [0] at offset 112920
user record b'cf7f596d-405e-4e29-948d-5195a94b364e' successfully produced to rest-topic [2] at offset 113672
user record b'4fd0051a-62ae-4929-a222-a80b6bd2d727' successfully produced to rest-topic [2] at offset 113673
user record b'828a7d12-f0ba-44e4-9b73-45a8c7f8bd38' successfully produced to rest-topic [2] at offset 113674
user record b'a6888257-7c74-42f1-9680-cc818317ff5' successfully produced to rest-topic [2] at offset 113675
user record b'8db1e91a-834a-4369-b01d-f04660543521' successfully produced to rest-topic [2] at offset 113676
user record b'8ebd9530-9efe-41e3-8cce-b2a079587a98' successfully produced to rest-topic [1] at offset 113624
user record b'a9f3153b-553b-4369-803a-80c97930c97a' successfully produced to rest-topic [1] at offset 113625
user record b'4f13236f-1a24-4def-83bd-6bdce15f80db' successfully produced to rest-topic [0] at offset 112921
user record b'1c72e806-3e04-4725-9f56-924f6886394c' successfully produced to rest-topic [0] at offset 112922
user record b'26e5d2c1-d687-4f9c-bc82-8a39d372be97' successfully produced to rest-topic [2] at offset 113677
user record b'97ed4169-e8c2-40ed-9490-cbf3f00e803' successfully produced to rest-topic [2] at offset 113678
user record b'020fee3e-0433-40fd-ad9e-0704438ca967' successfully produced to rest-topic [2] at offset 113679
user record b'd1f2616d-d5d1-4d40-8287-59e5cc72e637' successfully produced to rest-topic [2] at offset 113680
user record b'2bc8b086-9c11-4ba4-8522-e0452ad7e53a' successfully produced to rest-topic [0] at offset 112923
user record b'057d0b4a-e2d3-44e4-d8b5-7e36746a1a37' successfully produced to rest-topic [0] at offset 112924
user record b'25c2e0f0-7212-43d1-83f1-a920a090797a' successfully produced to rest-topic [0] at offset 112925
user record b'fd0a100f-f0a2-4b38-9f40-52a935fe5d40' successfully produced to rest-topic [1] at offset 113626
user record b'07aacac8-bda9-4798-b6d5-834404a6577f' successfully produced to rest-topic [0] at offset 112926
user record b'132d4ccc-eb4d-4631-bc21-1f87f525302f' successfully produced to rest-topic [0] at offset 112927
user record b'2f85a3d6-37f8-4c1f-8eb6-be0e13971045' successfully produced to rest-topic [0] at offset 112928
user record b'67cf885c-896d-42ed-83a1-c82db5b25810' successfully produced to rest-topic [1] at offset 113627
user record b'cf901655-9a01-41d9-863e-2ed5a59146c' successfully produced to rest-topic [1] at offset 113628
user record b'77b0839d-e223-4cc2-9fbc-405d2bb9b738' successfully produced to rest-topic [0] at offset 112949
user record b'b4f2b2bf-c083-43d1-83f1-97573b351a70' successfully produced to rest-topic [0] at offset 112929
user record b'b0c51a3d-e688-450e-8526-25c405742054' successfully produced to rest-topic [0] at offset 112931
user record b'871910b1-b368-4f17-9683-720894a4c617' successfully produced to rest-topic [1] at offset 113629
user record b'7d732680-07c7-4439-89da-58d4f22cd18f' successfully produced to rest-topic [1] at offset 113630
user record b'9b9f310a-8a4a-4b1e-b37a-6f065404d596' successfully produced to rest-topic [1] at offset 113631
user record b'8e9f4605-9163-4e3f-b60f-7675dcbb24b2' successfully produced to rest-topic [1] at offset 113632
user record b'ebac8b23-a25f-4078-b1bc-bd54d1f5380e' successfully produced to rest-topic [1] at offset 113633
user record b'b7785ef5-7463-4e15-a4fe-ffac4ba553bb' successfully produced to rest-topic [1] at offset 113634
user record b'950873ba-94f8-4f0d-bd94-a9a0506a8a09' successfully produced to rest-topic [2] at offset 113681
user record b'590671c-d5f1-4f00-8dfe-57d626314136' successfully produced to rest-topic [0] at offset 112932
user record b'f467505f-9f3a-b70d6f672a39' successfully produced to rest-topic [0] at offset 112933
user record b'3e582017-c69e-45e3-a9a3-295947583759' successfully produced to rest-topic [0] at offset 112934
user record b'cc6ee003-6fc2-4021-a76d-86f9649dbd7f' successfully produced to rest-topic [1] at offset 113635

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```

Now test two scenarios with your consumer code:

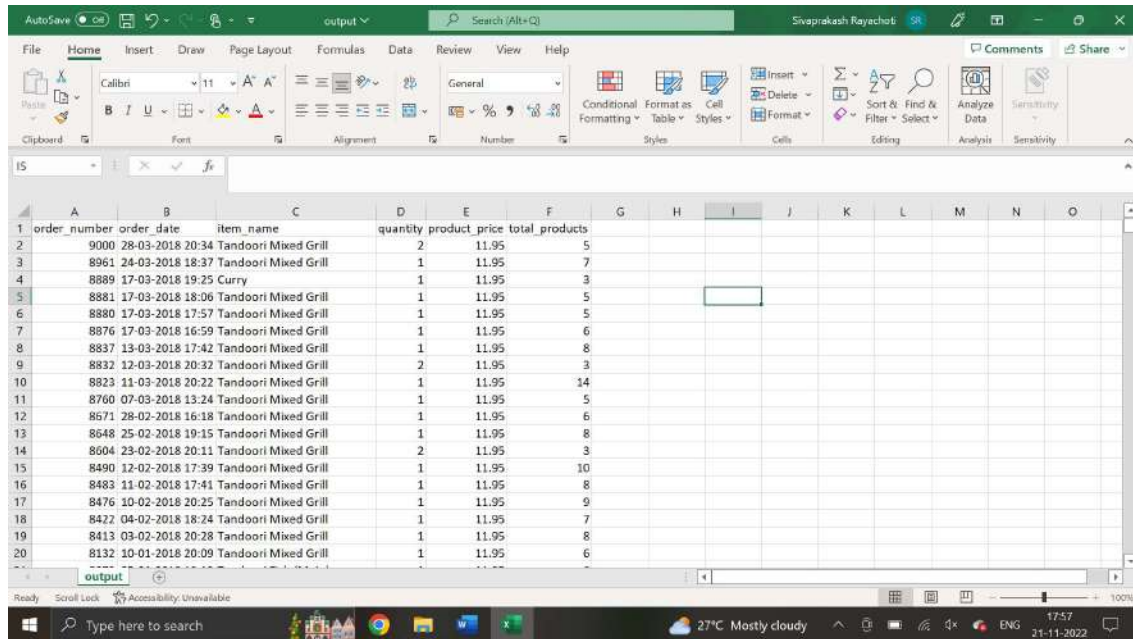
- Created 2 consumer codes with different group ids as "groupid1" and "groupid2".

[illegible]

It is observed that messages being shared by both consumers

7. Once above questions are done, write another kafka consumer to read data from kafka topic and from the consumer code create one csv file "output.csv" and append consumed records output.csv file.

Consumer code updated with required code and after deploying following output obtained.



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	order_number	order_date	item_name	quantity	product_price	total_products									
2	9000	28-03-2018 20:34	Tandoori Mixed Grill	2	11.95	5									
3	8961	24-03-2018 18:37	Tandoori Mixed Grill	1	11.95	7									
4	8889	17-03-2018 19:25	Curry	1	11.95	3									
5	8881	17-03-2018 18:06	Tandoori Mixed Grill	1	11.95	5									
6	8880	17-03-2018 17:57	Tandoori Mixed Grill	1	11.95	5									
7	8876	17-03-2018 16:59	Tandoori Mixed Grill	1	11.95	6									
8	8837	13-03-2018 17:42	Tandoori Mixed Grill	1	11.95	8									
9	8832	12-03-2018 20:32	Tandoori Mixed Grill	2	11.95	3									
10	8823	11-03-2018 20:22	Tandoori Mixed Grill	1	11.95	14									
11	8760	07-03-2018 13:24	Tandoori Mixed Grill	1	11.95	5									
12	8671	28-02-2018 16:18	Tandoori Mixed Grill	1	11.95	6									
13	8648	25-02-2018 19:15	Tandoori Mixed Grill	1	11.95	8									
14	8604	23-02-2018 20:11	Tandoori Mixed Grill	2	11.95	3									
15	8490	12-02-2018 17:39	Tandoori Mixed Grill	1	11.95	10									
16	8483	11-02-2018 17:41	Tandoori Mixed Grill	1	11.95	8									
17	8476	10-02-2018 20:25	Tandoori Mixed Grill	1	11.95	9									
18	8422	04-02-2018 18:24	Tandoori Mixed Grill	1	11.95	7									
19	8413	03-02-2018 20:28	Tandoori Mixed Grill	1	11.95	8									
20	8132	10-01-2018 20:09	Tandoori Mixed Grill	1	11.95	6									

Click on link for consumer code - [Link](#)