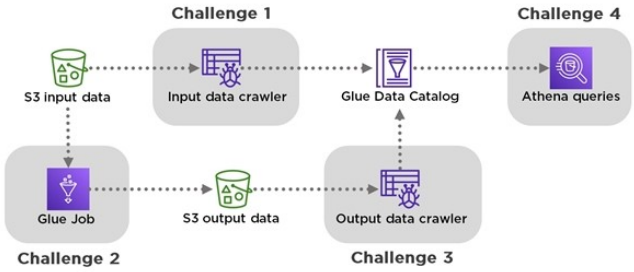
Step1 - source -1

07:52 AM

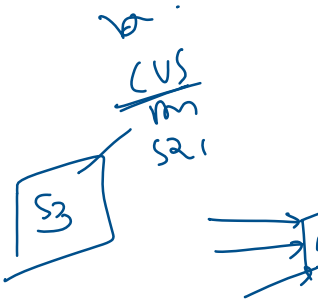
Crawl Input Sales Data on S3

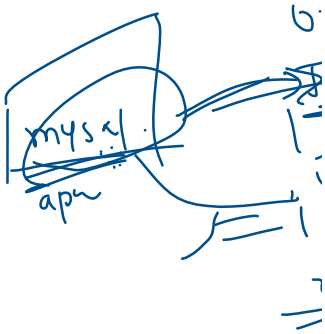
You received a CSV file with 100k sales records from the Globomantics Corporation. You need to achieve two objectives. First, transform the file into a Parquet file compressed with Snappy, so that it takes less storage and can be used by other Globomantics departments. Second, analyze the data and return the total sales amount.
This diagram shows the high-level pictures of how the challenges fit together. The S3 input data has 100k lines with sales details.

These challenges will help you analyze the input sales data using a **high-performance and low-cost approach**.



The first challenge is about creating a Glue crawler that crawls the sales input data on S3 and writes details about it into the Glue Data Catalog.
Here is what the input sales data looks like:
id,name,amount
1,Diego,671
2,Cristiano,405
…
100000,Roddy,652





1. Click the **Open AWS console** button to the right of these instructions, then use the provided credentials to log in.
2. Make sure you are in the proper region – the region selector is in the top right hand corner and it should display **Oregon**; if not, set the region to **US West (Oregon).**
3. Use the search box at the top of the page to navigate to the **AWS Glue** service.
4. From the left-hand menu underneath **Data catalog**, click on **Crawlers**.
5. On the **Crawlers** page, click on **Add crawler**.
6. Under **Crawler name**, enter input-data-crawler and click **Next**.
7. Leave defaults on the **Specify crawler source type** page and click **Next**.
8. On the **Add a data store** page, notice that **S3** is already selected as a data store and we need to specify the **Include path**, as follows:
   - Click on the folder icon at the right of the textbox that displays **s3://bucket/prefix/object**. After clicking, a dialog with **Choose S3 path** appears.
   - Click on the **+** sign next to the **aws-glue-athena-lab-...** bucket.
   - Click on **input-data** to select it.
   - Click on the **Select** button. This will select the S3 path to the input sales data and close the dialog.
   - Back in the **Add a data store** page, click the **Next** button.
9. On the **Add another data store** page, leave the default **No** selected and click **Next**.
10. On the **Choose an IAM role** page, notice **Create an IAM role** is already selected and it needs a name. In the text box displaying **Type a name…**, type SalesData and click **Next**.
11. On the **Create a schedule for this crawler** page, leave **Run on demand** selected and click **Next**.
12. On the **Configure the crawler's output** page, you define a database in the Glue Data Catalog to store the crawler's output. Click on the **Add database** button, under the **Database name** type sales-database, and click **Create**. The **sales-database** is now selected in the **Database** field, so click **Next**.
13. In the page with an overview of all steps, scroll down and click on the **Finish** button.
14. On the **Crawlers** page you can see the **input-data-crawler** and its **Ready** status. Click on the checkbox next to **input-data-crawler**, then click on the **Run crawler** button above it.
15. Watch the **Status** field of **input-data-crawler** as it changes to **Starting**. After about a minute, it changes to **Stopping**. Wait about a minute more until it changes back to **Ready**. The last column on the right is named **Tables added** and it indicates that one table is now added to the Glue Data Catalog.

Congratulations for successfully adding a table to the Glue Data Catalog!
To look at the new table, on the left-hand **AWS Glue** column menu, under **Databases**, click on **Tables** and you can see the **input_data** table. Click on the **input_data** table and scroll down to the **Schema** section.

Notice the three column names (id, name, amount) and their data types.

You did not specify them manually, instead the Glue Crawler recognized them automatically for you by crawling the input sales data on S3.