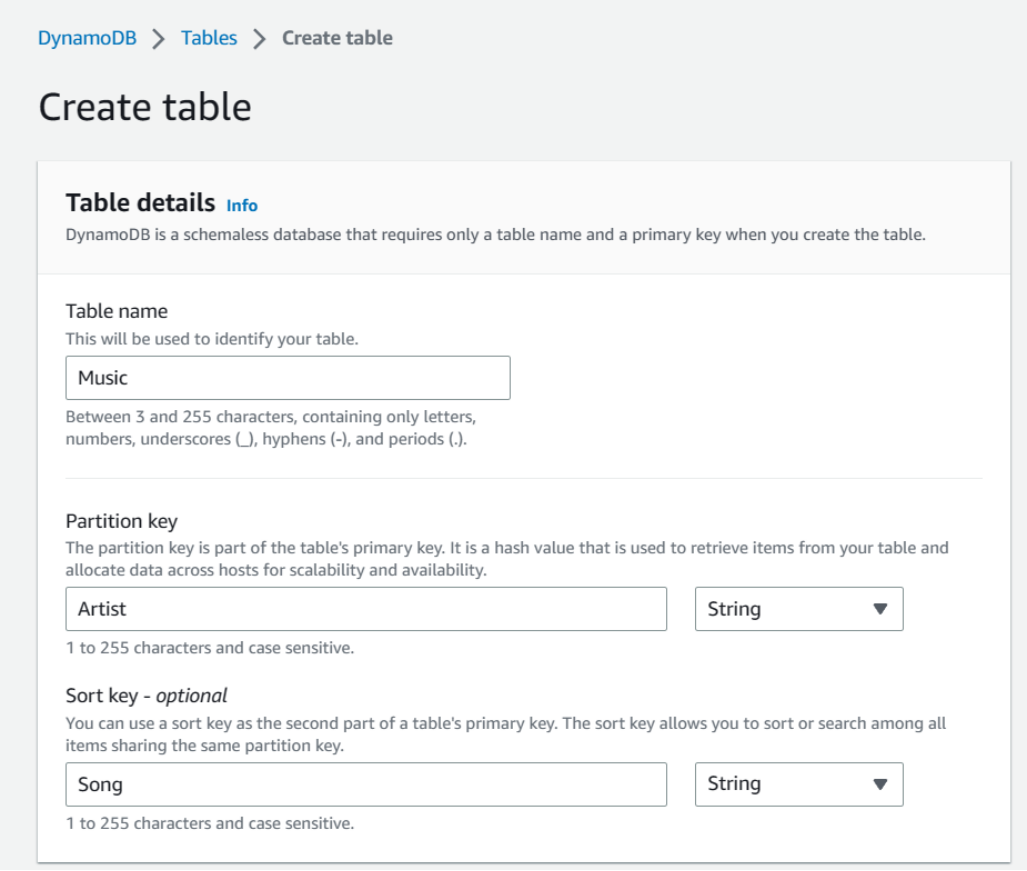
Introduction to Amazon DynamoDB

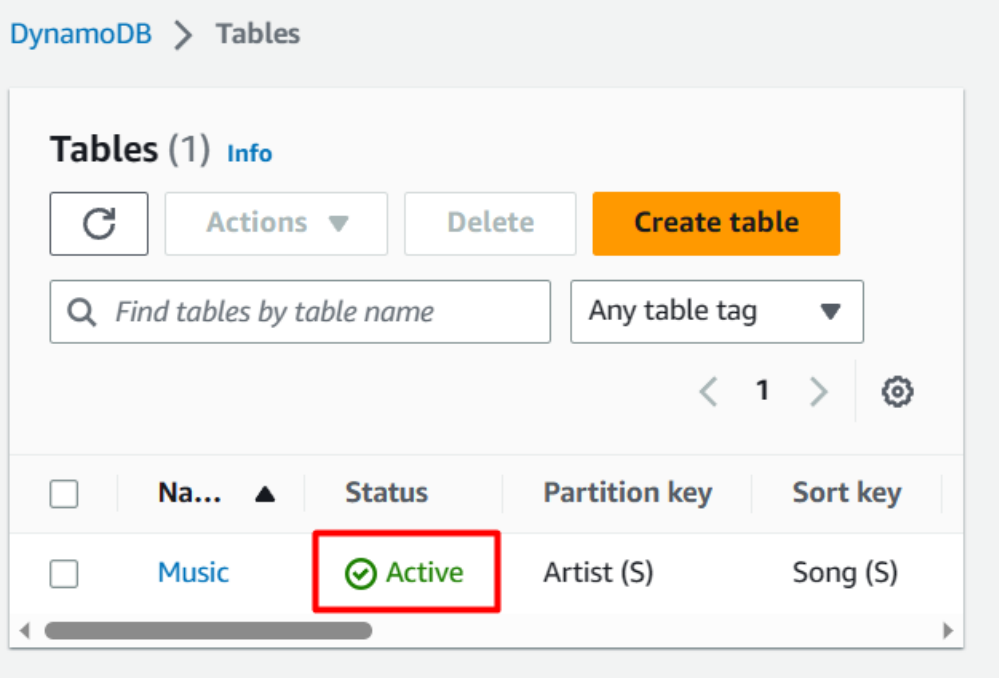
Task 1: Create a New Table

In this task we will create a new table named Music, in DynamoDB. Each table requires Primary Key. This key is used to partition data across DynamoDB servers. The table can have a Sort Key too.

To create a table in DynamoDB, in the search bar we search for and choose DynamoDB. From the starting page we choose Create table. On the Create table page we configure the options from the table, like Table name, Partition key, Sort key etc.



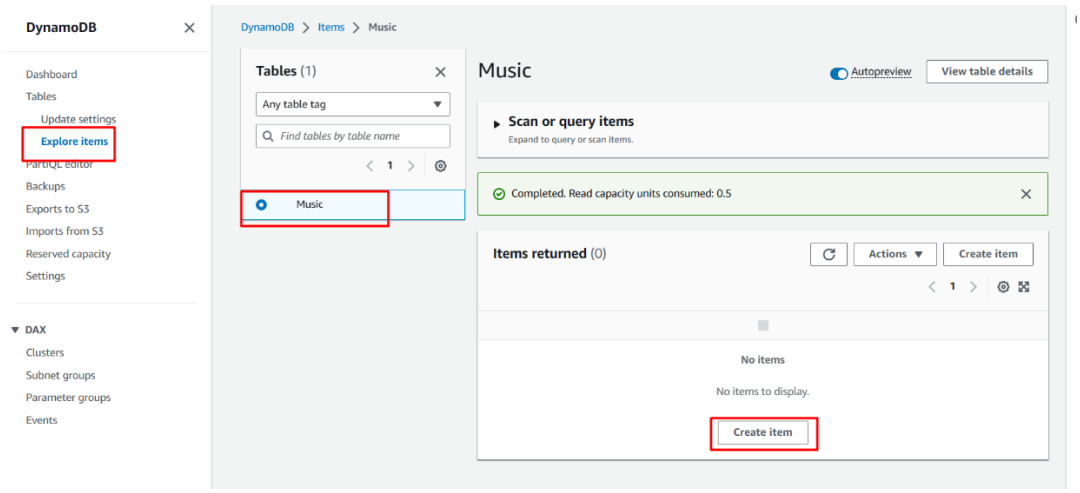
When we are done, we go to the Create table button. After the table is created, the status is changed to Active. With these we have successfully created a new table.



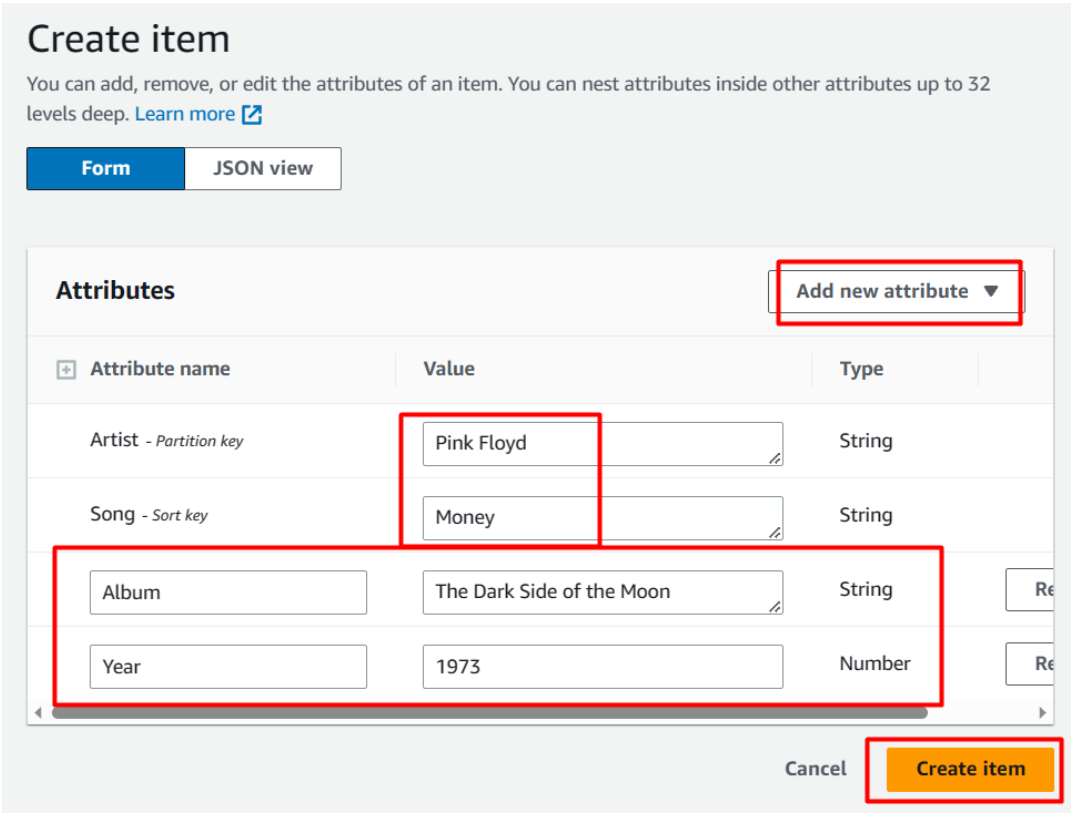
Task 2: Add Data

In this task we will add data toa our table. When we add an item to a DynamoDB table , we use only the Primary key and the Sort key. These two keys are the only ones that are required. In DynamoDB we can add attributes to one item that can be different to the attributes on other items.

For us to add data to the table we go to Explore items and from the left navigation pane we choose Explore items, we select the table we want to add items to and choose Create item.

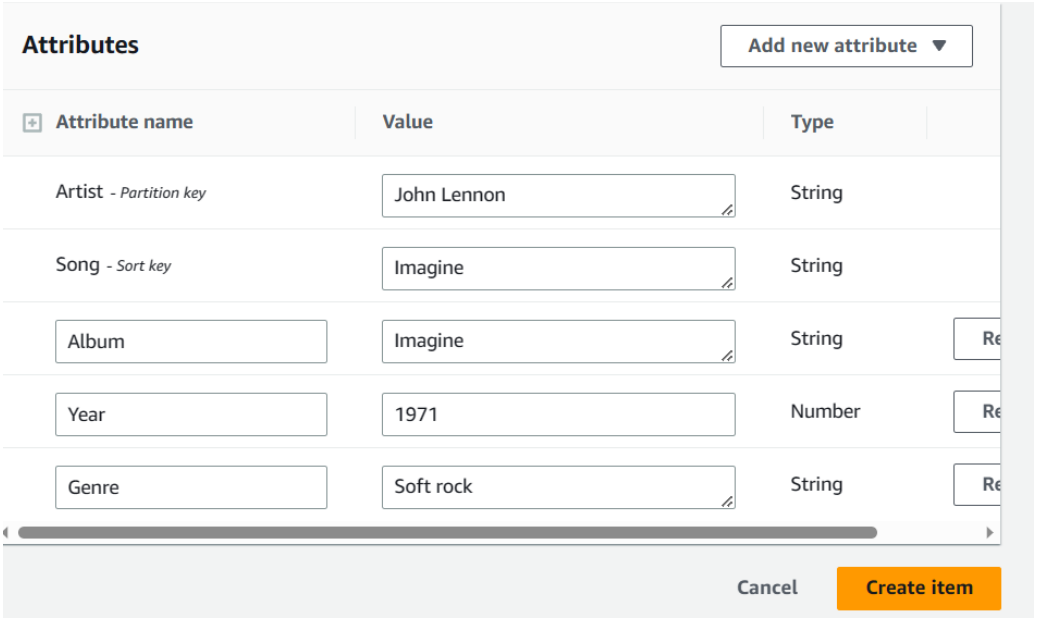


On the Create item page we can add our attributes. If we want to add additional items, we select Add new attribute.

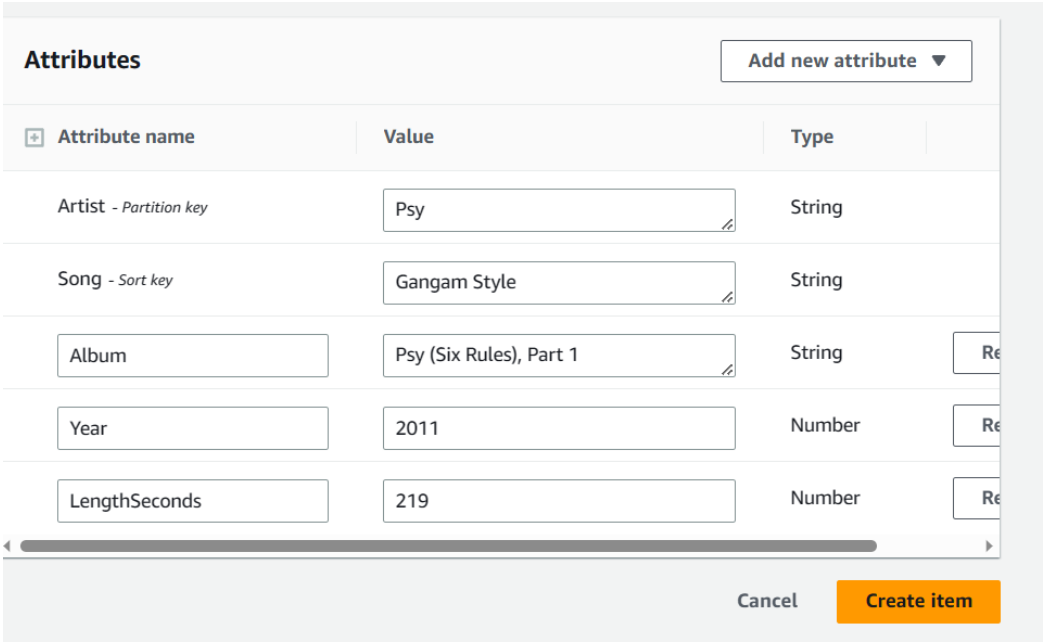


When the item is created, we get the message for successfully saving the item. For the needs for our exercise, we will create two new items, with all the needed attributes respectively. Screenshots will be provided for the two new items.

First item:



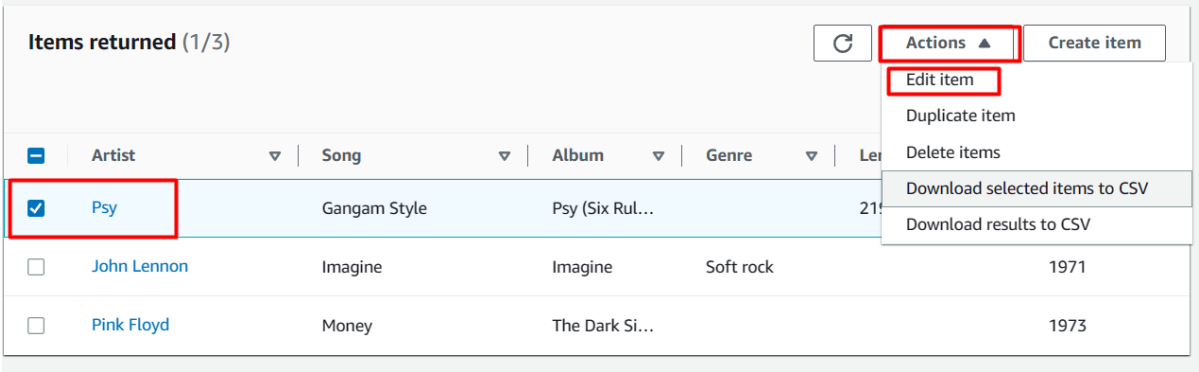
Second item:



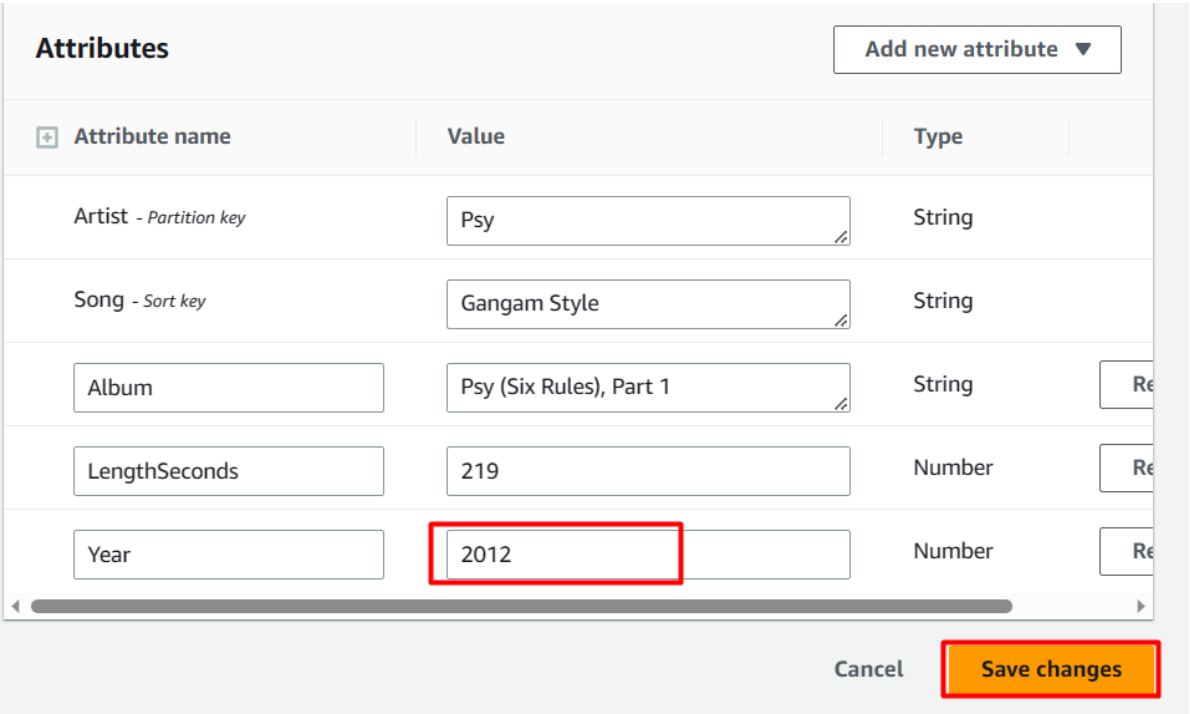
With these we successfully added data to our table.

Task 3: Modify an Existing Item

In this task we will modify an existing item. To do this we will select the Psy value for our Artist attribute from the list of offered items. We choose Actions and then Edit item.



We change the year from 2011 to 2012. When we are all done, we choose Save changes.



With this we successfully updated the item.

Task 4: Query the Table

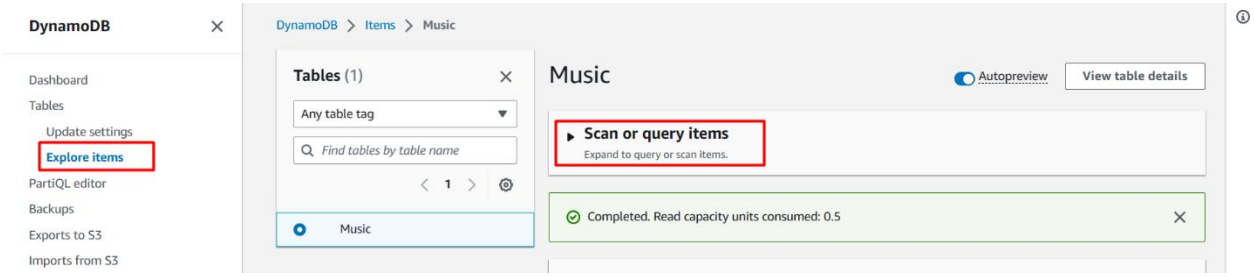
In this task we will query the table we created. There are two ways to accomplish this in DynamoDB tables:

- Query – finds items based on Primary Key and optionally Sort Key. More efficient.
- Scan – looks through every item in the table . Less efficient.

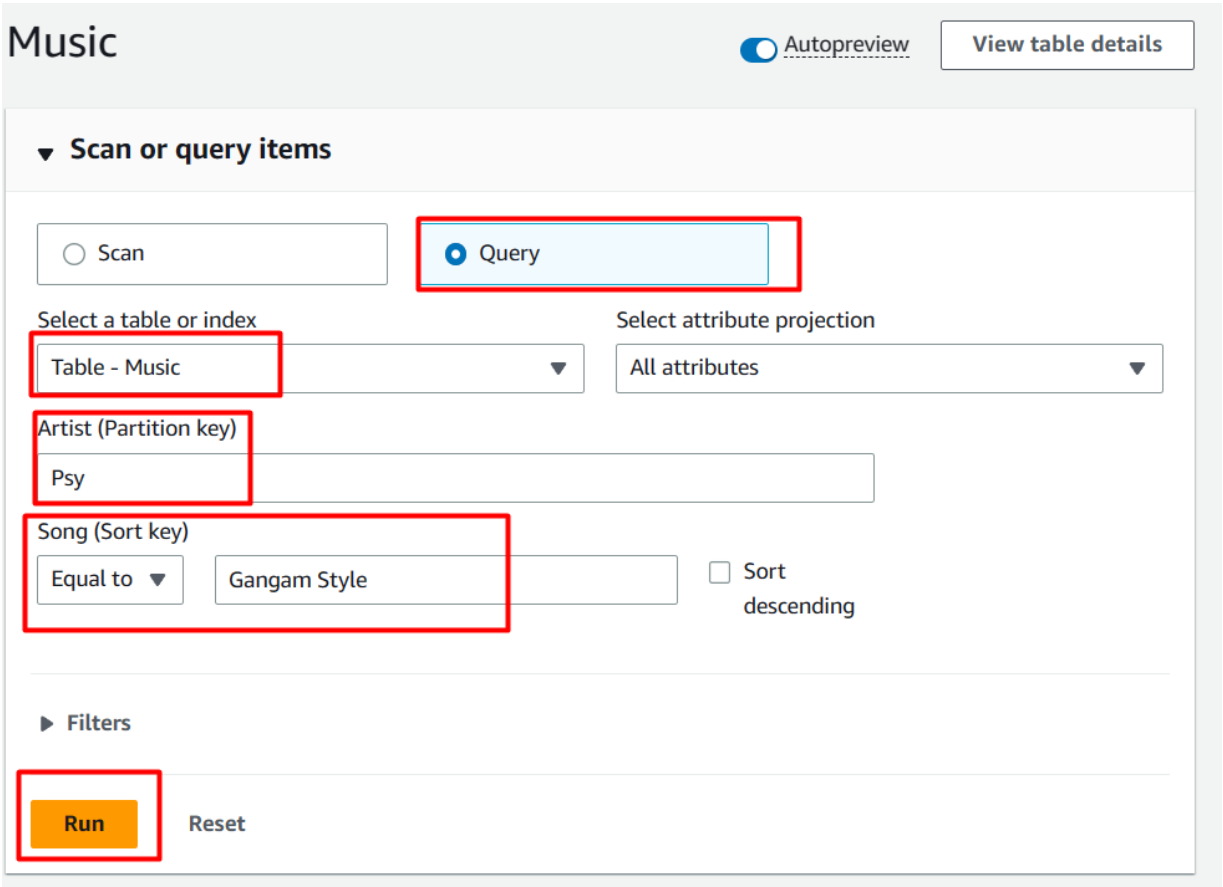
We will show how to use both queries.

Using the Query optional

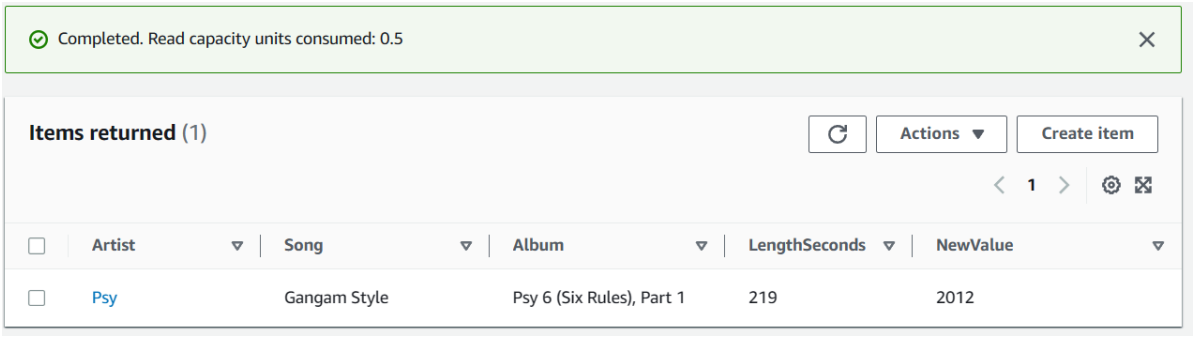
From the left navigation pane, we select Explore items and select the table. In our case the Music table. We go to Expand -> Scan or Query items and select Query.



We configure the Partition Key which is same as Primary Key and Sort Key and choose Run.



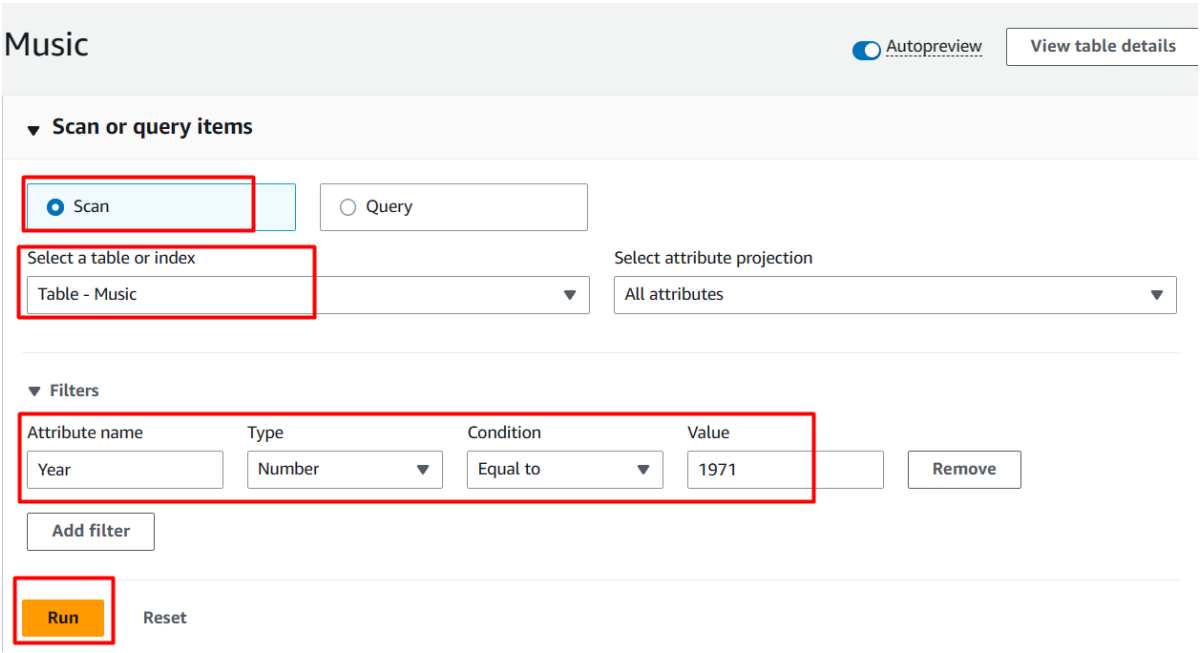
The result quickly appears in the list.



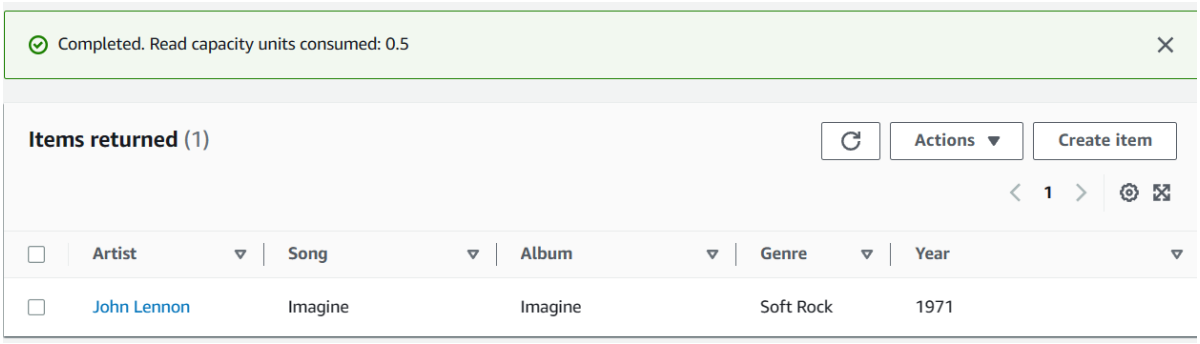
Next, we will show the Scan query.

Using the Scan option

Now instead of Query we select Scan. We expand the Filters section and configure the given options. After we do that, we choose Run.



The result is shown after we run the Scan.

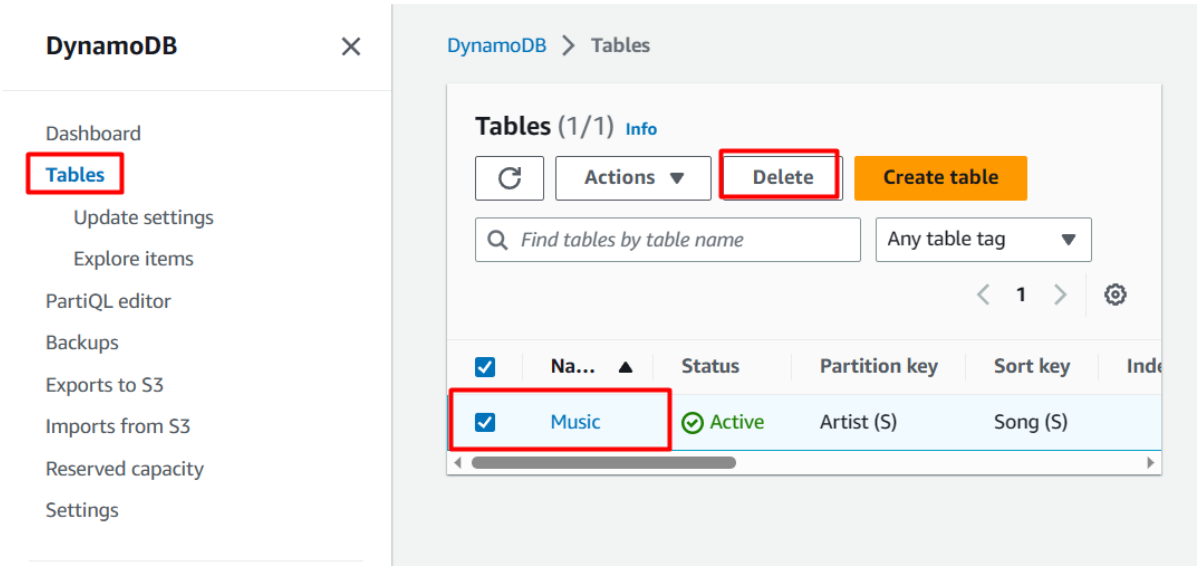


With this we successfully used the query and scan options.

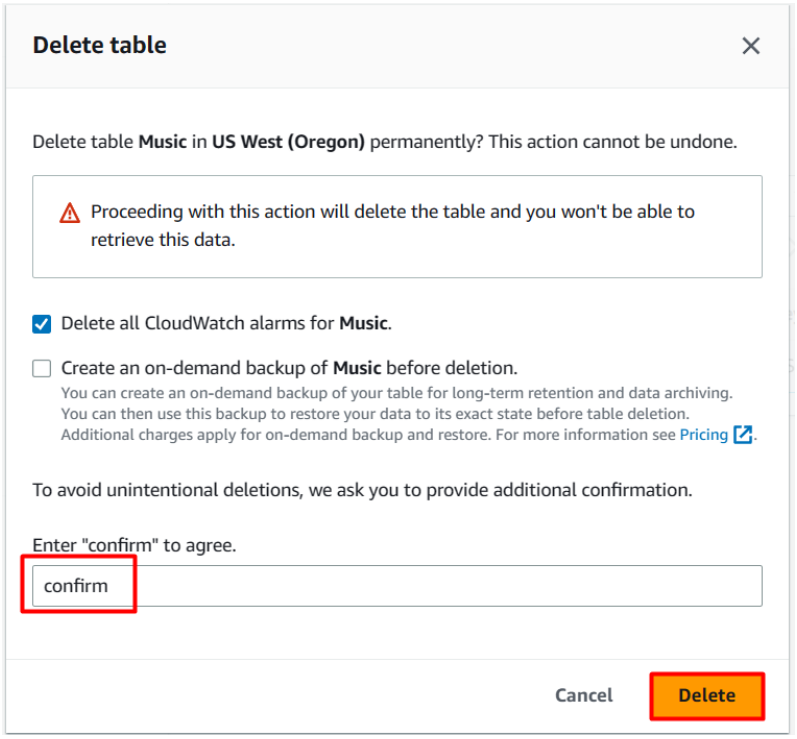
Task 5: Delete the Table

In this final task we will see how to delete the table we created. This deletes the table with all the data in the table.

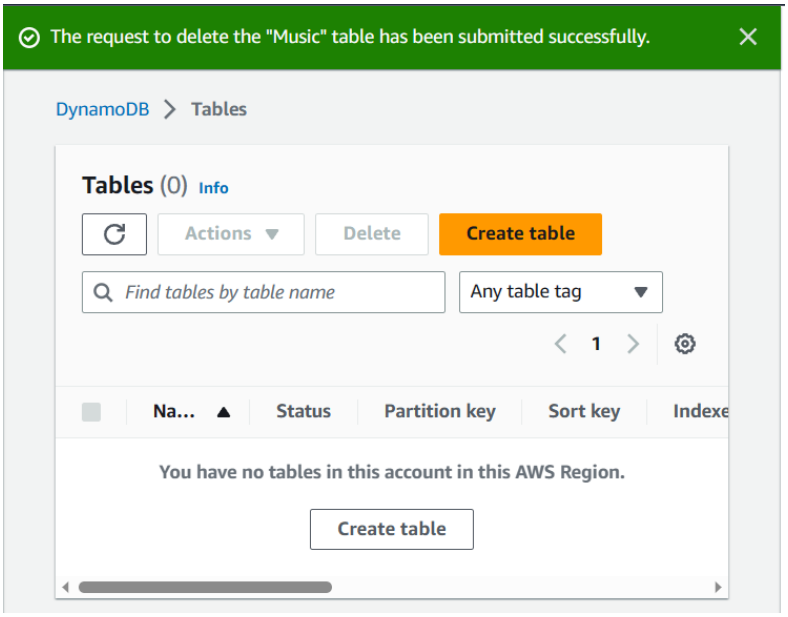
From the left navigation pane, we choose Tables and we select the table we want to delete and choose Delete.



When we click Delete a pop-up window appears. In the Enter “confirm” to agree filed we type confirm and click Delete.



After this we get a message that is displayed on the top of the screen. We use the refresh option to confirm the table deletion.



With this we have successfully deleted the table.