**Converting Epoch Timestamps to Datetime and Date Values**

This document provides step-by-step instructions to convert epoch timestamps into datetime and date values using Python (Pandas), MySQL, and Power BI (DAX).

## ****1. Python (Using Pandas)****

In Python, the **Pandas** library can be used to handle epoch timestamps and convert them into **datetime** and **date values**.

**a. Convert to Datetime Value**

To convert an epoch timestamp (in seconds) to a datetime value:

import pandas as pd

**# Example epoch timestamp (in seconds)**

epoch\_timestamp = 1672531200

# Convert to datetime (in seconds, use unit='s')

datetime\_value = pd.to\_datetime(epoch\_timestamp, unit='s')

print("Datetime Value:", datetime\_value)

**b. Convert to Date Value**

# Convert to date (removes time portion)

date\_value = pd.to\_datetime(epoch\_timestamp, unit='s'). date()

print("Date Value:", date\_value)

**2. MySQL**

In MySQL, the FROM\_UNIXTIME() function allows conversion of epoch timestamps to both datetime and date values.

**a. Convert to Datetime Value**

To convert an epoch timestamp to a **datetime value**:

SELECT FROM\_UNIXTIME(epoch\_time\_in\_seconds) AS datetime\_value;

**b. Convert to Date Value**

To extract only the **date value:**

SELECT DATE(FROM\_UNIXTIME(epoch\_time\_in\_seconds)) AS date\_value;

**3. Power BI (Using DAX)**

In Power BI, we can use DAX (Data Analysis Expressions) to convert an epoch timestamp into both datetime and date values.

**a. Convert to Datetime Value**

To convert an epoch timestamp (in **seconds**) to a **datetime** value, this DAX formula:

NewDatetimeColumn =

DATE(1970, 1, 1) + (Table [EpochTimeColumn] / 86400)

**b. Convert to Date Value**

To extract only the **date value**::

NewDateColumn =

DATEVALUE(DATE(1970, 1, 1) + (Table[EpochTimeColumn] / 86400))

**Summary:**

|  |  |  |
| --- | --- | --- |
| **Tool** | **Datetime Conversion** | **Date Conversion** |
| Python | pd.to\_datetime() | .date() |
| MySQL | FROM\_UNIXTIME() | DATE(FROM\_UNIXTIME()) |
| Power BI | DATE()+(EpochTimeColumn/86400) | DATEVALUE(DATE() + (EpochTimeColumn / 86400)) |

By following these steps, we can easily convert epoch timestamps to both datetime and date values in Python, MySQL, and Power BI.