**Pseudo Live Project**

**Conversion of DB2 to MongoDB**

By,

Aatish Raj (186839)

Thilagavathi B (187244)

Mridula Kumari (187393)

Tejaswi Chintala (186911)

K Gaurang Pathak (180637)

V R Saikumar Tirumalasetty (180630)

**Table of Contents**

[Introduction: 3](#_Toc19292405)

[Abstract: 3](#_Toc19292406)

[Requirements Phase: 3](#_Toc19292407)

[High Level Design ( HLD ): 4](#_Toc19292408)

[Architecture 4](#_Toc19292409)

[Low Level Design: 5](#_Toc19292410)

[Flow Chart 5](#_Toc19292411)

[Algorithm: 6](#_Toc19292412)

[Coding Phase: 7](#_Toc19292413)

[Testing Phase: 9](#_Toc19292414)

[Conclusion: 9](#_Toc19292415)

# Introduction:

Data migration is the process of selecting, preparing, extracting, and transforming data from one database to another**.** Data migration is very important now a days. Because now a days the migration is needed for converting the data from old database to new database. Here we convert the data from DB2 database to MongoDB using some batch scripts.

# Abstract:

At first we create the table in the DB2 environment. And then we insert values into the table. Then we have to write the batch script for connecting the DB2 database in command prompt. And then the data in the db2 database should be converted as a csv file format. After that the csv file should be passed as an argument with its location to convert the data into MongoDB.

# Requirements Phase:

|  |  |
| --- | --- |
| **S.No** | **Requirements** |
| 1. | Intel Pentium 90 or higher |
| 2. | Microsoft windows 95,98 or NT 4.0,2k,XP |
| 3. | Memory 32 MB of RAM (64 MB or more recommended) |
| 4. | IBM DB2 Tool |
| 5. | MongoDB environment |

|  |  |
| --- | --- |
| **Current Version** | **Fulfilling Requirements** |
| Intel®Core™i5-6500 CPU @ 3.20 GHz 3.19 GHz | Simple Black Tick Symbol - Clipart library |
| Windows 10 | Simple Black Tick Symbol - Clipart library |
| 8 GB RAM | Simple Black Tick Symbol - Clipart library |
| IBM DB2 Tool | Simple Black Tick Symbol - Clipart library |
| MongoDB environment | Simple Black Tick Symbol - Clipart library |

**Design Phase:**

## High Level Design ( HLD ):

### Architecture

Insert data into MongoDB

Create a collection

Fetch data from DB2 table

DB2

Convert the data into .csv format with column name as field

Store the .csv formatted data into a file

**Programming ETL**

## Low Level Design:

### Flow Chart

DB2 environment

no

yes

Creating tables in the DB2 environment

If tables are created successfully

Insert the data into the tables

Exporting the data from DB2 environment to csv file format

Creating database and collections in MongoDB environment

MongoDB environment

Passing the csv file as an argument and convert it into MongoDB format

### Algorithm:

**Step1:** Creating tables in DB2 environment.

**Step2:** Inserting the data into tables.

**Step3:** Export the data from DB2 environment to csv file format.

**Step4:** Connect to the MongoDB environment.

**Step5:** Creating the database in MongoDB environment.

**Step6:** Creating the collection in MongoDB environment.

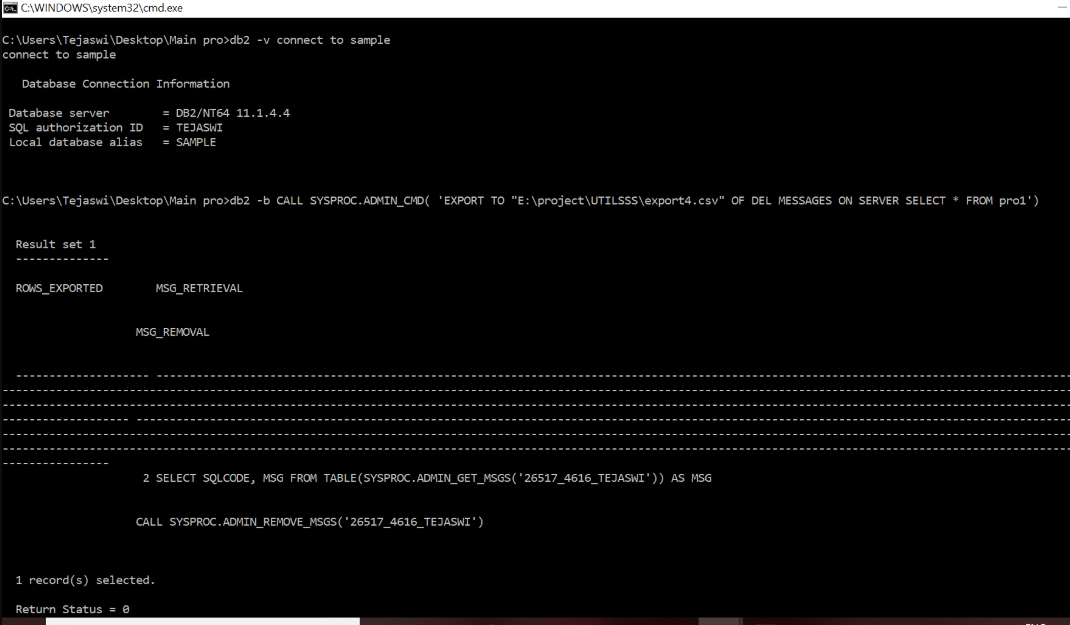
**Step7:** Passing the csv file as an argument.

**Step8:** Convert the csv file into MongoDB format.

# **Coding Phase**:

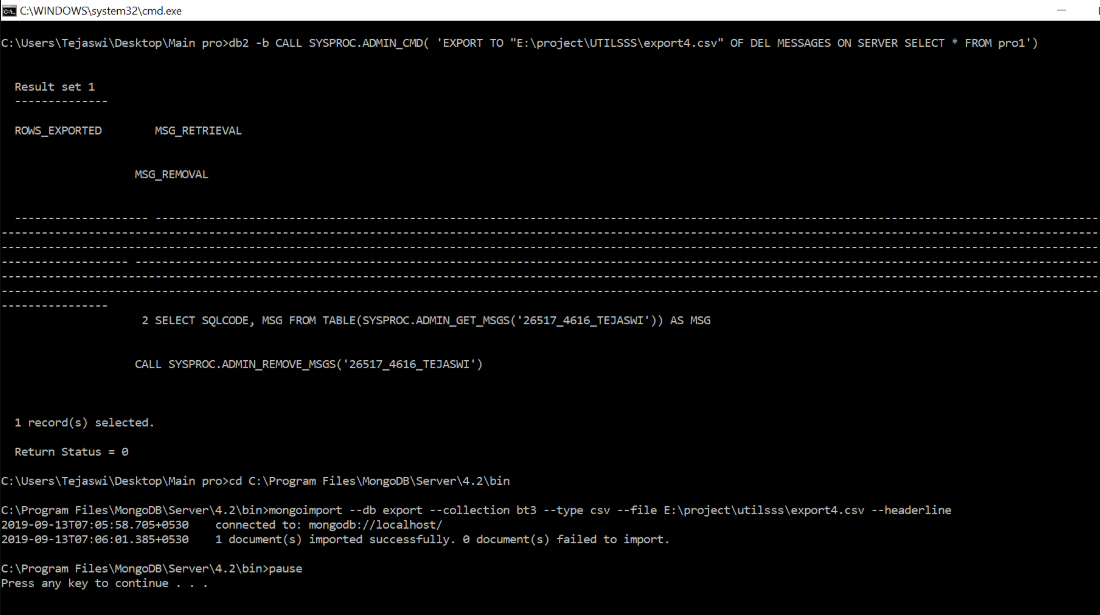
db2 –v connect to sample

db2 –b CALL SYSPROC.ADMIN\_CMD(‘EXPORT TO “E:\project\UTILSSS\export4.csv” OF DEL MESSAGES ON SERVER SELECT \* FROM pro1’)



cd C:\Program Files\MongoDB\Server\4.2\bin

mongoimport --db export --collection bt3 --type csv --file E:\project\utilsss\export4.csv --headerline



# Testing Phase:

# 

# Conclusion:

The table is created in DB2. After that the migration of data from DB2 to MongoDB is done by using batch scripts.