

```
In [1]: import pymysql
import sqlite3
from pymysql.err import MySQLError
import missingno as msn
import pandas as pd
import csv
```

```
In [2]: mydb = pymysql.connect(
        host="localhost",
        user="root",
        password="First@445",
    )
print("Connected to Server")

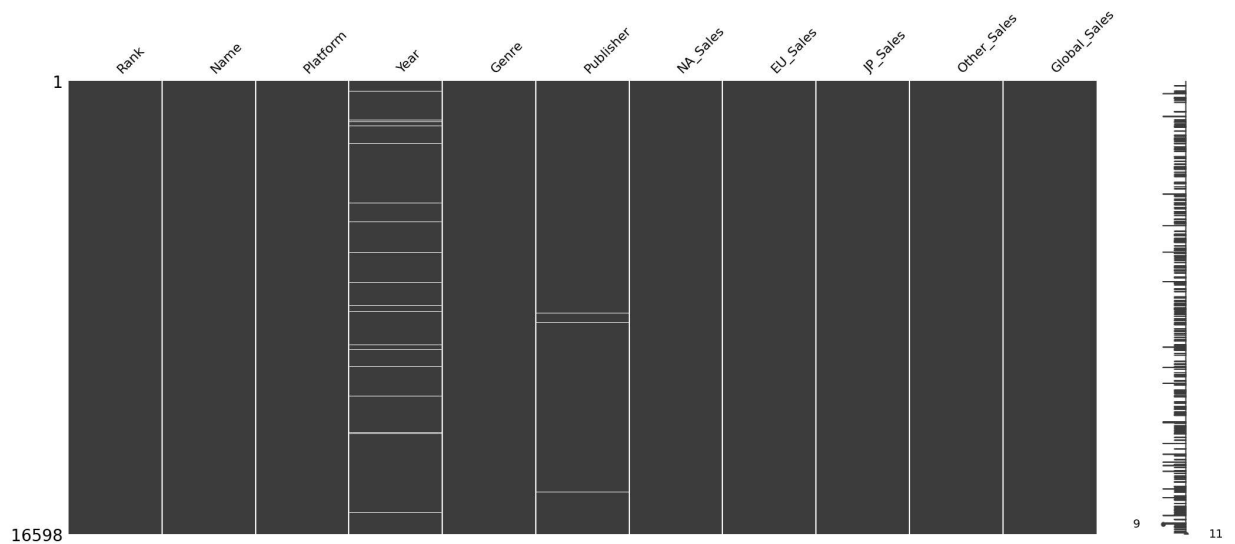
cursor = mydb.cursor()
```

Connected to Server

```
In [3]: # import the file
df=pd.read_csv(r"C:\Users\Kamalachandran\Desktop\Intern\task\task 7\video games sal
df.shape
```

Out[3]: (16598, 11)

```
In [4]: msn.matrix(df);
```



```
In [5]: df.isnull().sum()
```

```
Out[5]: Rank          0
        Name          0
        Platform      0
        Year          271
        Genre         0
        Publisher     58
        NA_Sales      0
        EU_Sales      0
        JP_Sales      0
        Other_Sales   0
        Global_Sales  0
        dtype: int64
```

```
In [6]: df = df.dropna()
        df.shape
```

```
Out[6]: (16291, 11)
```

```
In [7]: df.columns = (df.columns.str.strip().str.lower())
        df = df.rename(columns={'rank': 'position'})

        for i in df.columns:
            print (i)
```

```
position
name
platform
year
genre
publisher
na_sales
eu_sales
jp_sales
other_sales
global_sales
```

```
In [8]: df[["na_sales", "eu_sales", "jp_sales", "other_sales", "global_sales"]]
        =df[["na_sales", "eu_sales", "jp_sales", "other_sales", "global_sales"]].astype(float)
        df[["position", "year"]] = df[["position", "year"]].astype(int)
```

## SQL

```
In [9]: try:
        try:
            cursor.execute("CREATE DATABASE sale;")
            print("Database created")
        except MySQLError as e:
            raise

        try:
            cursor.execute("USE sale;")
            cursor.execute("""CREATE TABLE game_sales (Position int, Name text,
                Platform varchar(100), Year int, Genre varchar(100), Publisher text, NA_Sales
```

```

        EU_Sales double,JP_Sales double,Other_Sales double,Global_Sales double)
        """
    print("Table created")
except MySQLError as e:
    raise

except MySQLError as e:
    print("SQL error:", e)

```

Database created  
Table created

```

In [10]: try:
        insert_query = """
        INSERT INTO game_sales (position,name,platform,year,genre,publisher,
        na_sales,eu_sales,jp_sales,other_sales,global_sales)

        VALUES (%s, %s, %s, %s, %s, %s, %s, %s, %s, %s, %s)
        """

        data = [tuple(row) for row in df.to_numpy()]

        cursor.executemany(insert_query, data)

        mydb.commit()
        print(f"{cursor.rowcount} rows inserted successfully!")

    except MySQLError as e:
        print("SQL error:", e)

```

16291 rows inserted successfully!

```

In [11]: if cursor:
        cursor.close()
    if mydb:
        mydb.close()
    print("Server Connection Closed")

```

Server Connection Closed

```

In [13]: # Save to SQLite
        sqlite_conn = sqlite3.connect("sale.db") # this creates database.db
        df.to_sql("game_sales", sqlite_conn, if_exists="replace", index=False)
        sqlite_conn.commit()
        sqlite_conn.close()

        print("Data is saved to sale.db")

```

Data is saved to sale.db