Lab1.py:

This code is a Python script that parses an XML file containing book and paper information. It uses the xml.etree.ElementTree module to parse the XML file. The code defines a function called save2csv, which saves the extracted data into a CSV file. The main function, parseXML, opens the XML file, iterates through the elements, and calls the save2csv function to save the data. The script extracts information such as publisher, title, year, price, and type from the XML file and stores it in the CSV file.

Lab2.py:

This code scrapes a webpage that contains the collected State of the Union addresses of US Presidents. It uses the requests library to retrieve the webpage's content and the BeautifulSoup library to parse the HTML. The code extracts the names of the presidents and the links to their respective speech details. It then iterates over the links, retrieves the speech details from each page, and saves the data into a CSV file. Additionally, it creates separate text files for each president's speech details.

Lab3.py:

This code connects to a SQL Server database using the pyodbc library. It creates two tables, 'book' and 'author,' if they don't already exist in the database. The code reads data from the 'book.csv' and 'author.csv' files, and inserts the data into the respective tables in the database using SQL queries. The script commits the changes to the database after the insertion of the data.