

1)Convert bookstore.xml into json(file is located in Presentation->XML folder)

```
import xmltodict
```

```
import json
```

```
with open('Presentation/XML/bookstore.xml', 'r') as xml_file:
```

```
    xml_data = xml_file.read()
```

```
json_data = xmltodict.parse(xml_data, indent=4)
```

```
with open('Presentation/XML/bookstore.json', 'w') as json_file:
```

```
    json.dump(json_data, json_file, indent=4)
```

2)Write a query to give inner join,left outer join,right outer join and full outer join(refer SQL\_Assignments in Presentation folder)

-- Inner Join:

```
SELECT e.employee_id, e.first_name, e.last_name, e.department_id, d.department_name
```

```
FROM Employee e
```

```
INNER JOIN Department d ON e.department_id = d.department_id;
```

-- Left Outer Join

```
SELECT e.employee_id, e.first_name, e.last_name, e.department_id, d.department_name
```

```
FROM Employee e
```

```
LEFT OUTER JOIN Department d ON e.department_id = d.department_id;
```

-- Right Outer Join

```
SELECT e.employee_id, e.first_name, e.last_name, e.department_id, d.department_name
FROM Employee e
RIGHT OUTER JOIN Department d ON e.department_id = d.department_id;
```

-- Full Outer Join

```
SELECT e.employee_id, e.first_name, e.last_name, e.department_id, d.department_name
FROM Employee e
FULL OUTER JOIN Department d ON e.department_id = d.department_id;
```

3)Write a query to find duplicate records(refer SQL\_Assignments in Presentation folder)

-- Duplicate records based on first name:

```
SELECT first_name, COUNT(*)
FROM Employee
GROUP BY first_name
HAVING COUNT(*) > 1;
```

-- Duplicate records based on email:

```
SELECT email, COUNT(*)
FROM Employee
GROUP BY email
HAVING COUNT(*) > 1;
```

-- Duplicate records based on first name and last name:

```
SELECT first_name, last_name, COUNT(*)  
  
FROM Employee  
  
GROUP BY first_name, last_name  
  
HAVING COUNT(*) > 1;
```

-- Duplicate records based on first name and email:

```
SELECT first_name, email, COUNT(*)  
  
FROM Employee  
  
GROUP BY first_name, email  
  
HAVING COUNT(*) > 1;
```