PRACTICAL NO 7

XML Database

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Practical 7: XML Database

Aim:

Create a table employee having dept_id as number datatype and employee_spec as XML data type (XM_Type). The employee_spec is a schema with attributes emp_id, name, email, acc_no, managerEmail, dataOf Joning. Insert 10 tuples into employee table. Fire the following queries on XML database.

Query:

1. Retrieve the names of employee.
2. Retrieve the acc_no of employees.
3. Retrieve the names, acc_no, and email of employees.
4. Update the 3rd record from the table and display the name of an employee.
5. Delete 4th record from the table

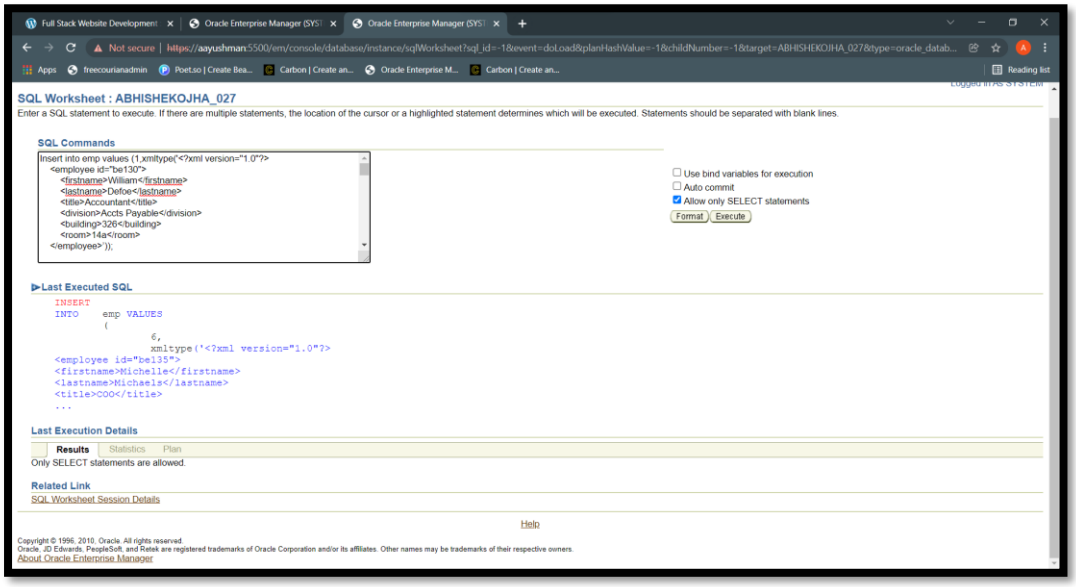
Software Requirements:

Oracle 11g Express Edition, Any browser.

Practical Implementation:

1. Create Table Employee

2. Insert Some Records in Created Table



SQL Plus

```
SQL> Insert into emp values (1,xmltype('<?xml version="1.0"?>
  2  <employee id="emp01">
  3          <firstname>Aayushman</firstname>
  4          <lastname>Ojha</lastname>
  5          <title>Manager</title>
  6          <division>IT</division>
  7          <building>212</building>
  8          <room>11g</room>
  9      </employee>'));

1 row created.

SQL> Insert into emp values (2,xmltype('<?xml version="1.0"?>
  2    <employee id="emp02">
  3          <firstname>Joye</firstname>
  4          <lastname>Dale</lastname>
  5          <title>Engineer</title>
  6          <division>Materials</division>
  7          <building>327</building>
  8          <room>19</room>
  9          <supervisor>sup01</supervisor>
 10      </employee>'));

1 row created.

SQL> Insert into emp values (3,xmltype('<?xml version="1.0"?>
  2    <employee id="emp03">
  3          <firstname>Enrique</firstname>
  4          <lastname>Iglesias</lastname>
  5          <title>Engineer</title>
  6          <division>Materials</division>
  7          <building>328</building>
  8          <room>18</room>
  9          <supervisor>sup02</supervisor>
 10      </employee>'));

1 row created.

SQL> Insert into emp values (4,xmltype('<?xml version="1.0"?>
  2      <employee id="emp04">
  3          <firstname>Sandra</firstname>
  4          <lastname>Rogers</lastname>
  5          <title>Engineering</title>
  6          <division>Materials</division>
```

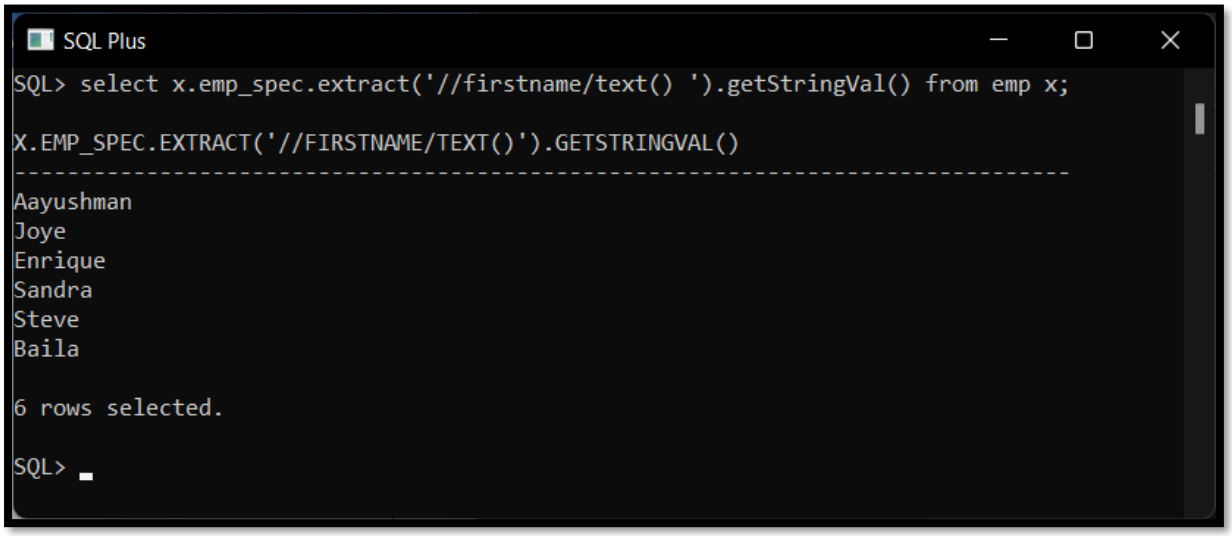
SQL Plus

```
SQL> Insert into emp values (4,xmltype('<?xml version="1.0"?>
  2      <employee id="emp04">
  3          <firstname>Sandra</firstname>
  4          <lastname>Rogers</lastname>
  5          <title>Engineering</title>
  6          <division>Materials</division>
  7          <building>312</building>
  8          <room>22</room>
  9      </employee>'));

1 row created.

SQL> Insert into emp values (5,xmltype('<?xml version="1.0"?>
  2      <employee id="emp05">
  3          <firstname>Steve</firstname>
  4          <lastname>Casey</lastname>
  5          <title>Engineering</title>
  6          <division>Materials</division>
  7          <building>345</building>
  8          <room>24</room>
  9      </employee>'));

1 row created.

SQL> Insert into emp values (6,xmltype('<?xml version="1.0"?>
  2      <employee id="emp06">
  3          <firstname>Baila</firstname>
  4          <lastname>Conmigo</lastname>
  5          <title>COO</title>
  6          <division>Management</division>
  7          <building>216</building>
  8          <room>264</room>
  9      </employee>'));

1 row created.

SQL>
```

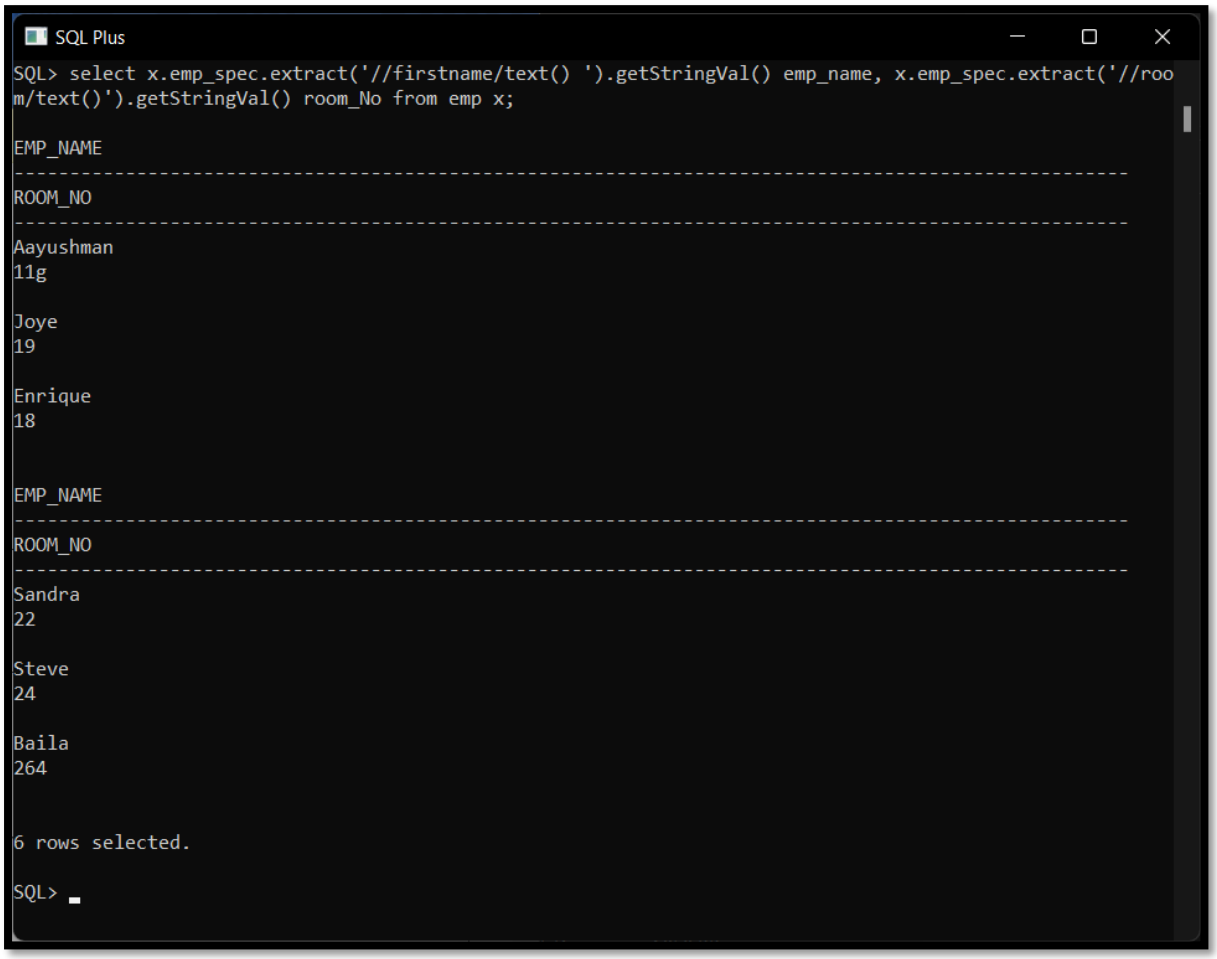
SQL Plus

```
SQL> select * from emp;

    EMP_ID EMP_SPEC
---------- --------------------------------------------------------------------
         1 <?xml version="1.0"?>
         2 <?xml version="1.0"?>
         3 <?xml version="1.0"?>
         4 <?xml version="1.0"?>
         5 <?xml version="1.0"?>
         6 <?xml version="1.0"?>

6 rows selected.

SQL>
```

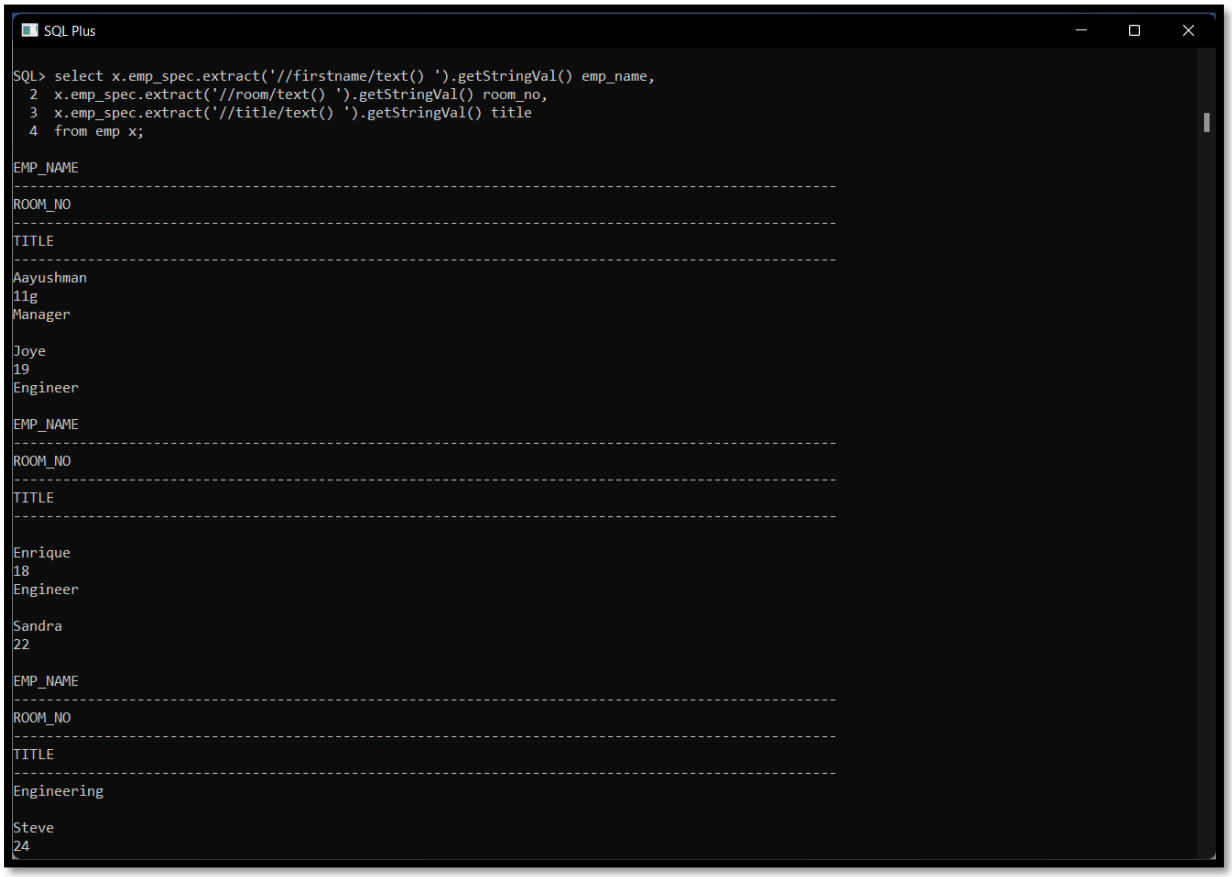
3. Get the first name:



4. Get the first name and room number



5. Get the first name and room number and title



6. Update 6th record from the table:

7. Delete a record from the table:

```
SQL> Delete from emp x where x.emp_spec.extract('//firstname/text() ').getStringVal() ='NotMichelle';

1 row deleted.
```

Conclusion :- Successfully Performed Operation like Create, Read, Update and Delete on XML Database.