

### **Program 1:**

Write a Document type definition (DTD) document for representing the structure of employee information

#### **Emps1.dtd:**

```
<?xml version="1.0" encoding="UTF-8"?>
<!ELEMENT emps (emp+,dept)>
<!ELEMENT emp (name,salary,desig)>
<!ELEMENT name (firstname,lastname)>
<!ELEMENT firstname (#PCDATA)>
<!ELEMENT lastname (#PCDATA)>
<!ELEMENT salary (#PCDATA)>
<!ELEMENT desig (#PCDATA)>
<!ELEMENT dept (deptname,desc)>
<!ELEMENT deptname (#PCDATA)>
<!ELEMENT desc (#PCDATA)>
<!ATTLIST emp empno ID #REQUIRED>
<!ATTLIST emp mgrid IDREF #IMPLIED>
<!ATTLIST emp working (yes | no) 'yes'>
<!ATTLIST dept deptno ID #REQUIRED>
```

**Employee1.xml:**

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE emps SYSTEM "emps1.dtd">
<emps>
  <emp empno="e201" working="yes">
    <name>
      <firstname>sai</firstname>
      <lastname>ram</lastname>
    </name>
    <salary>5000</salary>
    <desig>pm</desig>
  </emp>
  <emp empno="e202" mgrid="e201" working="yes">
    <name>
      <firstname>satish</firstname>
      <lastname>kumar</lastname>
    </name>
    <salary>2000</salary>
    <desig>programmer</desig>
  </emp>
  <dept deptno="d111">
    <deptname>developing team</deptname>
    <desc>develops programs</desc>
  </dept>
</emps>
```