

## Program Code :

### Carrentals.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<carrentals xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:noNamespaceSchemaLocation="carrental.xsd">

  <carrental rentalid="ABC123">
    <renter>Piyush</renter>

    <rentalinfo>
      <car>BMW</car>
      <rentaldate>2024-02-06</rentaldate>
      <returndate>2024-02-13</returndate>
      <pickuplocation>Zoop Cars</pickuplocation>
      <returnlocation>Zoop Cars</returnlocation>
    </rentalinfo>

    <additionalinfo>
      <specialrequests>GPS Navigation</specialrequests>
      <insurance>true</insurance>
    </additionalinfo>
  </carrental>

  <carrental rentalid="DEF456">
    <renter>Rajesh</renter>

    <rentalinfo>
      <car>Mercedes</car>
      <rentaldate>2024-02-08</rentaldate>
      <returndate>2024-02-15</returndate>
      <pickuplocation>Rapid Rent</pickuplocation>
      <returnlocation>Rapid Rent</returnlocation>
    </rentalinfo>

    <additionalinfo>
      <specialrequests>Child Seat</specialrequests>
      <insurance>true</insurance>
    </additionalinfo>
  </carrental>

</carrentals>
```

## Carrental1.xsd

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">

  <xs:element name="carrentals">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="carrental" minOccurs="0" maxOccurs="unbounded">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="renter" type="xs:string"/>
              <xs:element name="rentalinfo">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="car" type="xs:string"/>
                    <xs:element name="rentaldate" type="xs:date"/>
                    <xs:element name="returndate" type="xs:date"/>
                    <xs:element name="pickuplocation" type="xs:string"/>
                    <xs:element name="returnlocation" type="xs:string"/>
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
              <xs:element name="additionalinfo" minOccurs="0">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="specialrequests" type="xs:string"
minOccurs="0"/>
                    <xs:element name="insurance" type="xs:boolean"
default="false"/>
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
            <xs:attribute name="rentalid" type="xs:string"
use="required"/>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

## validation.py

```
from lxml import etree
```

```
schema_file = 'C:/Users/PIYUSH/OneDrive/Desktop/SDL lab  
Assignments/SDL_Assignment_2 code/SDL_Assignment_3 code/carrental.xsd'  
schema = etree.XMLSchema(etree.parse(schema_file))
```

```
xml_file = 'C:/Users/PIYUSH/OneDrive/Desktop/SDL lab  
Assignments/SDL_Assignment_2 code/SDL_Assignment_3 code/carrental.xml'  
xml_doc = etree.parse(xml_file)
```

```
if schema.validate(xml_doc):  
    print("Validation successful.")  
else:  
    print("Validation failed. Errors:")  
    for error in schema.error_log:  
        print(error)
```

## Output :

Validation successful

