How to Create XML with ElementTree

Creating XML with ElementTree is very simple. In this section, we will attempt to create the XML above with Python. Here's the code:

```
import xml.etree.ElementTree as xml

def createXML(filename):
    """
    Create an example XML file
    """
    root = xml.Element("zAppointments")
    appt = xml.Element("appointment")
    root.append(appt)

    # add appointment children
    begin = xml.SubElement(appt, "begin")
    begin.text = "1181251680"

    uid = xml.SubElement(appt, "uid")
    uid.text = "040000008200E000"

    alarmTime = xml.SubElement(appt, "alarmTime")
    alarmTime.text = "1181572063"

    state = xml.SubElement(appt, "state")

    location = xml.SubElement(appt, "location")

    duration = xml.SubElement(appt, "duration")
    duration.text = "1800"

    subject = xml.SubElement(appt, "subject")

    tree = xml.ElementTree(root)
    with open(filename, "w") as fh:
        tree.write(fh)

if __name__ == "__main__":
    createXML("appt.xml")
```

If you run this code, you should get something like the following (probably all on one line):

```
<zAppointments>
```

```
    <appointment>
        <begin>1181251680</begin>
        <uid>040000008200E000</uid>

        <alarmTime>1181572063</alarmTime>
        <state />
        <location />
        <duration>1800</duration>
        <subject />
    </appointment>
</zAppointments>
```

This is pretty close to the original and is certainly valid XML. While it's not quite the same, it's close enough. Let's take a moment to review the code and make sure we understand it. First we create the root element by using ElementTree's Element function. Then we create an appointment element and append it to the root. Next we create SubElements by passing the appointment Element object (appt) to SubElement along with a name, like "begin". Then for each SubElement, we set its text property to give it a value. At the end of the script, we create an ElementTree and use it to write the XML out to a file.

Now we're ready to learn how to edit the file!