

The symbol @ is used to denote attribute nodes.

4. Address all title attribute nodes within book elements anywhere in the document that have the value “Artificial Intelligence” (see figure A.3).

```
//book/@title=[.="Artificial Intelligence"]
```

5. Address all books with title “Artificial Intelligence” (see figure A.4).

```
//book[@title="Artificial Intelligence"]
```

We call a test within square brackets a *filter expression*. It restricts the set of addressed nodes. Note the difference between this expression and the one in query 4. Here we address book elements the title of which satisfies a certain condition. In query 4 we collected title attribute nodes of book elements. A comparison of figures A.3 and A.4 illustrates the difference.

6. Address the first author element node in the XML document.

```
//author[1]
```

7. Address the last book element within the first author element node in the document.

```
//author[1]/book[last()]
```

8. Address all book element nodes without a title attribute.

```
//book[not (@title)]
```

These examples are meant to give a feeling of the expressive power of path expressions. In general, a path expression consists of a series of steps separated by slashes. A *step* consists of an axis specifier, a node test, and an optional predicate.