

XPath#1 – Easy

```
doc("j_caesar.xml")//ACT//SPEECH/../../*/../TITLE
```

Output (5 nodes)

```
<TITLE>ACT I</TITLE>  
<TITLE>ACT II</TITLE>  
<TITLE>ACT III</TITLE>  
<TITLE>ACT IV</TITLE>  
<TITLE>ACT V</TITLE>
```

XPath #2 - Easy

```
doc("j_caesar.xml")//PERSONAE/PGROUP/PERSONA
```

Output (27 nodes)

```
<PERSONA>OCTAVIUS CAESAR</PERSONA>  
<PERSONA>MARCUS ANTONIUS</PERSONA>  
<PERSONA>M. AEMILIUS LEPIDUS</PERSONA>  
<PERSONA>CICERO</PERSONA>  
<PERSONA>PUBLIUS</PERSONA>  
<PERSONA>POPILIUS LENA</PERSONA>  
<PERSONA>MARCUS BRUTUS</PERSONA>  
<PERSONA>CASSIUS</PERSONA>  
<PERSONA>CASCA</PERSONA>  
<PERSONA>TREBONIUS</PERSONA>  
<PERSONA>LIGARIUS</PERSONA>  
<PERSONA>DECIUS BRUTUS</PERSONA>  
<PERSONA>METELLUS CIMBER</PERSONA>  
<PERSONA>CINNA</PERSONA>  
<PERSONA>FLAVIUS</PERSONA>  
<PERSONA>MARULLUS</PERSONA>  
<PERSONA>LUCILIUS</PERSONA>  
<PERSONA>TITINIUS</PERSONA>  
<PERSONA>MESSALA</PERSONA>  
<PERSONA>Young CATO</PERSONA>  
<PERSONA>VOLUMNIUS</PERSONA>  
<PERSONA>VARRO</PERSONA>  
<PERSONA>CLITUS</PERSONA>  
<PERSONA>CLAUDIUS</PERSONA>  
<PERSONA>STRATO</PERSONA>  
<PERSONA>LUCIUS</PERSONA>  
<PERSONA>DARDANIUS</PERSONA>
```

Output (27 nodes)- Sorted.

```
<PERSONA>CASCA</PERSONA>
<PERSONA>CASSIUS</PERSONA>
<PERSONA>CICERO</PERSONA>
<PERSONA>CINNA</PERSONA>
<PERSONA>CLAUDIUS</PERSONA>
<PERSONA>CLITUS</PERSONA>
<PERSONA>DARDANIUS</PERSONA>
<PERSONA>DECIUS BRUTUS</PERSONA>
<PERSONA>FLAVIUS</PERSONA>
<PERSONA>LIGARIUS</PERSONA>
<PERSONA>LUCILIUS</PERSONA>
<PERSONA>LUCIUS</PERSONA>
<PERSONA>M. AEMILIUS LEPIDUS</PERSONA>
<PERSONA>MARCUS ANTONIUS</PERSONA>
<PERSONA>MARCUS BRUTUS</PERSONA>
<PERSONA>MARULLUS</PERSONA>
<PERSONA>MESSALA</PERSONA>
<PERSONA>METELLUS CIMBER</PERSONA>
<PERSONA>OCTAVIUS CAESAR</PERSONA>
<PERSONA>POPILIUS LENA</PERSONA>
<PERSONA>PUBLIUS</PERSONA>
<PERSONA>STRATO</PERSONA>
<PERSONA>TITINIUS</PERSONA>
<PERSONA>TREBONIUS</PERSONA>
<PERSONA>VARRO</PERSONA>
<PERSONA>VOLUMNIUS</PERSONA>
<PERSONA>Young CATO</PERSONA>
```

XPath #3 - Easy

```
doc("j_caesar.xml")//ACT//SPEECH/../../*/../../SCENE//SPEAKER/../../TITLE
```

Output (18 nodes)

```
<TITLE>SCENE I. Rome. A street.</TITLE>
<TITLE>SCENE II. A public place.</TITLE>
<TITLE>SCENE III. The same. A street.</TITLE>
<TITLE>SCENE I. Rome. BRUTUS's orchard.</TITLE>
<TITLE>SCENE II. CAESAR's house.</TITLE>
<TITLE>SCENE III. A street near the Capitol.</TITLE>
<TITLE>SCENE IV. Another part of the same street, before the house of BRUTUS.</TITLE>
<TITLE>SCENE I. Rome. Before the Capitol; the Senate sitting above.</TITLE>
<TITLE>SCENE II. The Forum.</TITLE>
<TITLE>SCENE III. A street.</TITLE>
<TITLE>SCENE I. A house in Rome.</TITLE>
<TITLE>SCENE II. Camp near Sardis. Before BRUTUS's tent.</TITLE>
<TITLE>SCENE III. Brutus's tent.</TITLE>
<TITLE>SCENE I. The plains of Philippi.</TITLE>
<TITLE>SCENE II. The same. The field of battle.</TITLE>
<TITLE>SCENE III. Another part of the field.</TITLE>
<TITLE>SCENE IV. Another part of the field.</TITLE>
<TITLE>SCENE V. Another part of the field.</TITLE>
```

Output (18 nodes) - Sorted.

```
<TITLE>SCENE I. A house in Rome.</TITLE>
<TITLE>SCENE I. Rome. A street.</TITLE>
<TITLE>SCENE I. Rome. BRUTUS's orchard.</TITLE>
<TITLE>SCENE I. Rome. Before the Capitol; the Senate sitting above.</TITLE>
<TITLE>SCENE I. The plains of Philippi.</TITLE>

<TITLE>SCENE II. A public place.</TITLE>
<TITLE>SCENE II. CAESAR's house.</TITLE>
<TITLE>SCENE II. Camp near Sardis. Before BRUTUS's tent.</TITLE>
<TITLE>SCENE II. The Forum.</TITLE>
<TITLE>SCENE II. The same. The field of battle.</TITLE>

<TITLE>SCENE III. A street near the Capitol.</TITLE>
<TITLE>SCENE III. A street.</TITLE>
<TITLE>SCENE III. Another part of the field.</TITLE>
<TITLE>SCENE III. Brutus's tent.</TITLE>
<TITLE>SCENE III. The same. A street.</TITLE>

<TITLE>SCENE IV. Another part of the field.</TITLE>
<TITLE>SCENE IV. Another part of the same street, before the house of BRUTUS.</TITLE>
<TITLE>SCENE V. Another part of the field.</TITLE>
```

XPath #4- Easy

```
doc("j_caesar.xml")//PERSONAE//GRPDESCR
```

Output (6 nodes)

```
<GRPDESCR>triumvirs after death of Julius Caesar.</GRPDESCR>
<GRPDESCR>senators.</GRPDESCR>
<GRPDESCR>conspirators against Julius Caesar.</GRPDESCR>
<GRPDESCR>tribunes.</GRPDESCR>
<GRPDESCR>friends to Brutus and Cassius.</GRPDESCR>
<GRPDESCR>servants to Brutus.</GRPDESCR>
```

Output (6 nodes)- Sorted

```
<GRPDESCR>conspirators against Julius Caesar.</GRPDESCR>
<GRPDESCR>friends to Brutus and Cassius.</GRPDESCR>
<GRPDESCR>senators.</GRPDESCR>
<GRPDESCR>servants to Brutus.</GRPDESCR>
<GRPDESCR>tribunes.</GRPDESCR>
<GRPDESCR>triumvirs after death of Julius Caesar.</GRPDESCR>
```

XPath #5 – Medium

```
doc("j_caesar.xml")//((./ACT/SCENE), PERSONAE)/TITLE
```

Output (19 nodes)

```
<TITLE>SCENE I. Rome. A street.</TITLE>
<TITLE>SCENE II. A public place.</TITLE>
<TITLE>SCENE III. The same. A street.</TITLE>
<TITLE>SCENE I. Rome. BRUTUS's orchard.</TITLE>
<TITLE>SCENE II. CAESAR's house.</TITLE>
<TITLE>SCENE III. A street near the Capitol.</TITLE>
<TITLE>SCENE IV. Another part of the same street, before the house of BRUTUS.</TITLE>
<TITLE>SCENE I. Rome. Before the Capitol; the Senate sitting above.</TITLE>
<TITLE>SCENE II. The Forum.</TITLE>
<TITLE>SCENE III. A street.</TITLE>
<TITLE>SCENE I. A house in Rome.</TITLE>
<TITLE>SCENE II. Camp near Sardis. Before BRUTUS's tent.</TITLE>
<TITLE>SCENE III. Brutus's tent.</TITLE>
<TITLE>SCENE I. The plains of Philippi.</TITLE>
<TITLE>SCENE II. The same. The field of battle.</TITLE>
<TITLE>SCENE III. Another part of the field.</TITLE>
<TITLE>SCENE IV. Another part of the field.</TITLE>
<TITLE>SCENE V. Another part of the field.</TITLE>
<TITLE>Dramatis Personae</TITLE>
```

Output (19 nodes) - Sorted

```
<TITLE>Dramatis Personae</TITLE>
<TITLE>SCENE I. A house in Rome.</TITLE>
<TITLE>SCENE I. Rome. A street.</TITLE>
<TITLE>SCENE I. Rome. BRUTUS's orchard.</TITLE>
<TITLE>SCENE I. Rome. Before the Capitol; the Senate sitting above.</TITLE>
<TITLE>SCENE I. The plains of Philippi.</TITLE>
<TITLE>SCENE II. A public place.</TITLE>
<TITLE>SCENE II. CAESAR's house.</TITLE>
<TITLE>SCENE II. Camp near Sardis. Before BRUTUS's tent.</TITLE>
<TITLE>SCENE II. The Forum.</TITLE>
<TITLE>SCENE II. The same. The field of battle.</TITLE>
<TITLE>SCENE III. A street near the Capitol.</TITLE>
<TITLE>SCENE III. A street.</TITLE>
<TITLE>SCENE III. Another part of the field.</TITLE>
<TITLE>SCENE III. Brutus's tent.</TITLE>
<TITLE>SCENE III. The same. A street.</TITLE>
<TITLE>SCENE IV. Another part of the field.</TITLE>
<TITLE>SCENE IV. Another part of the same street, before the house of BRUTUS.</TITLE>
<TITLE>SCENE V. Another part of the field.</TITLE>
```

XPath#6 – Medium

```
doc("j_caesar.xml")//((ACT/SCENE/SPEECH)/(SPEAKER)/../.[not (../TITLE=../LINE)]/../TITLE
```

Output (18 nodes)

```
<TITLE>SCENE I. Rome. A street.</TITLE>
<TITLE>SCENE II. A public place.</TITLE>
<TITLE>SCENE III. The same. A street.</TITLE>
<TITLE>SCENE I. Rome. BRUTUS's orchard.</TITLE>
<TITLE>SCENE II. CAESAR's house.</TITLE>
<TITLE>SCENE III. A street near the Capitol.</TITLE>
<TITLE>SCENE IV. Another part of the same street, before the house of BRUTUS.</TITLE>
<TITLE>SCENE I. Rome. Before the Capitol; the Senate sitting above.</TITLE>
<TITLE>SCENE II. The Forum.</TITLE>
<TITLE>SCENE III. A street.</TITLE>
<TITLE>SCENE I. A house in Rome.</TITLE>
<TITLE>SCENE II. Camp near Sardis. Before BRUTUS's tent.</TITLE>
<TITLE>SCENE III. Brutus's tent.</TITLE>
<TITLE>SCENE I. The plains of Philippi.</TITLE>
<TITLE>SCENE II. The same. The field of battle.</TITLE>
<TITLE>SCENE III. Another part of the field.</TITLE>
<TITLE>SCENE IV. Another part of the field.</TITLE>
<TITLE>SCENE V. Another part of the field.</TITLE>
```

Output (18 nodes)- Sorted

```
<TITLE>SCENE I. A house in Rome.</TITLE>
<TITLE>SCENE I. Rome. A street.</TITLE>
<TITLE>SCENE I. Rome. BRUTUS's orchard.</TITLE>
<TITLE>SCENE I. Rome. Before the Capitol; the Senate sitting above.</TITLE>
<TITLE>SCENE I. The plains of Philippi.</TITLE>
<TITLE>SCENE II. A public place.</TITLE>
<TITLE>SCENE II. CAESAR's house.</TITLE>
<TITLE>SCENE II. Camp near Sardis. Before BRUTUS's tent.</TITLE>
<TITLE>SCENE II. The Forum.</TITLE>
<TITLE>SCENE II. The same. The field of battle.</TITLE>
<TITLE>SCENE III. A street near the Capitol.</TITLE>
<TITLE>SCENE III. A street.</TITLE>
<TITLE>SCENE III. Another part of the field.</TITLE>
<TITLE>SCENE III. Brutus's tent.</TITLE>
<TITLE>SCENE III. The same. A street.</TITLE>
<TITLE>SCENE IV. Another part of the field.</TITLE>
<TITLE>SCENE IV. Another part of the same street, before the house of BRUTUS.</TITLE>
<TITLE>SCENE V. Another part of the field.</TITLE>
```

XPath #7 – Medium

```
doc("j_caesar.xml")//SPEECH/SPEAKER[not(./text()=../*/text())]/../..../TITLE
```

Output (1 node)

```
<TITLE>The Tragedy of Julius Caesar</TITLE>
```

XPath #8 – Medium

```
doc("j_caesar.xml")//SPEECH/SPEAKER[./text()]/../*/..../..../TITLE
```

Output (1 node)

```
<TITLE>The Tragedy of Julius Caesar</TITLE>
```

XPath #9 – Hard

```
doc("j_caesar.xml")//ACT[not((./TITLE)=../TITLE) or (./SCENE/TITLE=../SCENE/TITLE)]/*/SPEECH/..../TITLE
```

Output Empty

Empty

XPath #10 - Hard

```
doc("j_caesar.xml")//(ACT/SCENE/SPEECH)/(SPEAKER)/...[not (../TITLE=../LINE) and (../*/SPEAKER=../SPEAKER)]/..../TITLE
```

Output (18 nodes)

```
<TITLE>SCENE I. Rome. A street.</TITLE>
<TITLE>SCENE II. A public place.</TITLE>
<TITLE>SCENE III. The same. A street.</TITLE>
<TITLE>SCENE I. Rome. BRUTUS's orchard.</TITLE>
<TITLE>SCENE II. CAESAR's house.</TITLE>
<TITLE>SCENE III. A street near the Capitol.</TITLE>
<TITLE>SCENE IV. Another part of the same street, before the house of BRUTUS.</TITLE>
<TITLE>SCENE I. Rome. Before the Capitol; the Senate sitting above.</TITLE>
<TITLE>SCENE II. The Forum.</TITLE>
<TITLE>SCENE III. A street.</TITLE>
<TITLE>SCENE I. A house in Rome.</TITLE>
<TITLE>SCENE II. Camp near Sardis. Before BRUTUS's tent.</TITLE>
<TITLE>SCENE III. Brutus's tent.</TITLE>
<TITLE>SCENE I. The plains of Philippi.</TITLE>
<TITLE>SCENE II. The same. The field of battle.</TITLE>
<TITLE>SCENE III. Another part of the field.</TITLE>
<TITLE>SCENE IV. Another part of the field.</TITLE>
<TITLE>SCENE V. Another part of the field.</TITLE>
```

Output (18 nodes)- Sorted

<TITLE>SCENE I. A house in Rome.</TITLE>
<TITLE>SCENE I. Rome. A street.</TITLE>
<TITLE>SCENE I. Rome. BRUTUS's orchard.</TITLE>
<TITLE>SCENE I. Rome. Before the Capitol; the Senate sitting above.</TITLE>
<TITLE>SCENE I. The plains of Philippi.</TITLE>
<TITLE>SCENE II. A public place.</TITLE>
<TITLE>SCENE II. CAESAR's house.</TITLE>
<TITLE>SCENE II. Camp near Sardis. Before BRUTUS's tent.</TITLE>
<TITLE>SCENE II. The Forum.</TITLE>
<TITLE>SCENE II. The same. The field of battle.</TITLE>
<TITLE>SCENE III. A street near the Capitol.</TITLE>
<TITLE>SCENE III. A street.</TITLE>
<TITLE>SCENE III. Another part of the field.</TITLE>
<TITLE>SCENE III. Brutus's tent.</TITLE>
<TITLE>SCENE III. The same. A street.</TITLE>
<TITLE>SCENE IV. Another part of the field.</TITLE>
<TITLE>SCENE IV. Another part of the same street, before the house of BRUTUS.</TITLE>
<TITLE>SCENE V. Another part of the field.</TITLE>