EXERCISE 4.4

```
Diagram:
- Document
- Sheet
- DrawingObject
- Text
- GeometricObject
- Group
- Rectangle
- Circle
- Ellipse
- Line
- Square
```

EXERCISE 4.7

```
Diagram:
- Association
- AssociationEnd
- Class
- Attribute
```
EXERCISE 4.9

EXERCISE 4.10

4.10 The class diagram in Figure E4.3 does support multiple inheritance. A class may have multiple generalization roles of subclass participating in a variety of generalizations.
EXERCISE 4.12

Diagram of GeneralizationRole:
- GeneralizationRole
  - SuperclassRole (1:1 relationship)
  - SubclassRole (1:* relationship)
  - Generalization
    - generalizSetName
  - Class
    - className

Diagram of Generalization:
- Generalization
  - superclass
  - subclass
  - Class
    - className
Exercise 4.14

- The charge for late return is calculated as follows:
  
  
  \[ \text{lateCharge} = \begin{cases} 
  (\text{returnDate} - \text{dueDate}) \times \text{chargePerDay} & \text{if returnDate} > \text{dueDate} \\
  0 & \text{otherwise} 
  \end{cases} \]

- The entities involved are:
  
  - **Library**
    - **chargePerDay**
  
  - **Borrowing**
    - **dueDate**
    - **returnDate**
    - **lateCharge**
  
  - **Book**
    - **title**