

## North South University

Department of Electrical and Computer Engineering

CSE 215L: Programming Language II Lab

Lab – 7B Topic(s): Inheritance

---

### Lab Task:

1. Use the following UML diagrams to design Book, EBook and PaperBook classes. Here Book class has two child classes: EBook and PaperBook.

Book
<pre>- isbn: int - title: String - author: String - price: double</pre>
<pre>+ Book() + Book(isbn: int, title: String, author: String, price: double) + setIsbn(isbn: int): void + setTitle(title: String): void + setAuthor(author: String): void + setPrice(price: double): void + getIsbn(): int + getTitle(): String + getAuthor(): String + getPrice(): double + toString(): String .</pre>

EBook
<pre>- downloadUrl: String - sizeMB: double // in MB</pre>
<pre>+ EBook() + EBook(downloadUrl: String, sizeMB: double) + setDownloadUrl(downloadUrl: String): void + setSizeMB(sizeMB: double): void + getAuthor(): String + getPrice(): double + toString(): String .</pre>

PaperBook
<pre>- shippingWeight: double // in kg - inStock: bool</pre>
<pre>+ PaperBook() + PaperBook(shippingWeight: double, inStock: bool) + setShippingWeight(shippingWeight: double): void + setInStock(inStock: bool): void + getShippingWeight(): double + getInStock(): bool + toString(): String .</pre>

Now write a test program that performs the following steps:

- Create an instance of EBook and PaperBook class respectively
- Print all their properties using the overridden toString() method