

Assignment : Inheritance

1. Implement an abstract superclass called Item and define all common operations on this class (constructors, getters, setters, equals, toString, print, checkIn, checkOut, addItem, etc). Have private data for: identification number, title, and number of copies.
 2. Implement an abstract subclass of Item named WrittenItem and define all common operations on this class. Added private data for author.
 3. Implement 2 subclasses of WrittenItem: Book and JournalPaper.
 - 3.1. Class Book: no new private data. When needed, override/overload methods from the superclass.
 - 3.2. Class JournalPaper: added private data for year published. When needed, override/overload methods from the superclass.
 4. Implement another abstract subclass of Item named MediaItem and define all common operations on this class. Added private data for runtime (integer).
 5. Implement 2 subclasses of MediaItem: Video and CD.
 - 5.1. Class Video: added private data for director, genre and year released. When needed, override/overload methods from the superclass.
 - 5.2. Class CD: added private data for artist and genre. When needed, override/overload methods from the superclass.
- Write the definitions of these classes and a client program (your choice!) showing them in use.