Advanced Object Oriented Programming – Inheritance, `super`, Polymorphism

1. Suppose that a program contains the following classes.
   ```
   class A {
        public A() {
             System.out.print("A");
        }
   }

   class B extends A {
        public B() {
             System.out.print("B");
        }
   }
   ```

   What, if anything, would be printed by each of the following statements if they appeared in the main method of the program?
   a) `A a = new A();`
   b) `B b = new B();`
   c) `A c = new B();`

2. Suppose a program is to use the classes `Book` and `History` (extending `Book`).
   a) In which class should each of the following fields be declared:
      - `title`
      - `timePeriod`
      - `author`
   b) Write a constructor for the class `Book` with header
      ```
      public Book (String title, String author)
      ```
   c) Write a constructor for the class `History` with header
      ```
      public History (String title, String author,
      String timePeriod)
      ```
   d) Write a `toString` method for the `Book` class.
   e) Write a `toString` method for the `History` class.