

Quiz 3 Code

COMP 302 Winter 2020

All the questions on the quiz pertain to the following Java code:

```
class Upper {
    private int i;
    private String name;
    public Upper(int i){
        name = "Upper";
        this.i = i;}
    public void set(Upper n){ i = n.show();}
    public int show(){return i;}
}

class Middle extends Upper {
    private int j;
    private String name;
    public Middle(int i){
        super(i+1);
        name = "Middle";
        this.j = i;}
    public void set(Upper n){ j = n.show();}
    public int show(){return j;}
}

class Lower extends Middle {
    private int i;
    private String name;
    public Lower(int i){
        super(i+1);
        name = "Lower";
        this.i = i;}
    public void set(Lower n){ i = n.show();}
    public int show(){return i;}
}
```

```
class Tester {  
  
    public static void main(String[] args){  
        Lower a = new Lower(1);  
        Middle b = a;  
        Upper c = new Middle(5);  
  
        System.out.println(a.show());  
        System.out.println(b.show());  
        System.out.println(c.show());  
  
        a.set(c);  
        b.set(a);  
        c.set(b);  
  
        System.out.println(a.show());  
        System.out.println(b.show());  
        System.out.println(c.show());  
    }  
}
```