

1 Loading and Riding

Given the following lines of code, comment out the lines which are examples of overloading, overriding, or errors, and specify each one.

```
class Library{
    int add(int a,int b)
    float add(float a,int b)
    float add(int a ,float b)
    void add(float a)
    int add(int a)
    void add(int a)
    add(int a)
}
class BookDetails {
    String title;
    setBook(String title){}
}
class ScienceBook extends BookDetails {
    setBook(String title){}
    setBook(String title, String publisher,float price){}
}
```

2 Reversing Arrays

1. Write code to reverse an array *iteratively*

```
public static void reverse (int [] arr) {
    for(int i = 0, i < _____, i++) {
        int temp = _____;
        arr[_____] = arr[_____];
        arr[_____] = _____;
    }
}
```

2. Write code to reverse an array *recursively*

```
public static void reverse (int [] arr) {
    reverseHelper(_____, 0, _____)
```

```

    }
    static void reverseHelper(int[] arr, int beg, int end){
        if(_____) {
            int temp = _____;
            arr[_____] = arr[_____];
            arr[_____] = _____;
            _____;
            _____;
            _____;
        }
    }
}

```

3 Confusing Constructors (Fa17 Tutor Worksheet)

What is the output of the following program after we execute the main method?

```

public class Confusing {
    private Confusing(Object o) {
        System.out.println("Data Structures");
    }
    private Confusing(double[] dArray) {
        System.out.println("Algorithims");
    }
    public static void main(String[] args) {
        double[] array = new double[4];
        IntList list = IntList.list(array);
        Confusing Rish = new Confusing(array);
        Confusing Kinn = new Confusing(list);
        Confusing Shub = new Confusing(null);
    }
}

```