1. (20%)
Bad array.
The answer is: 10
Oops! exam
The answer is: 20
Oops! five

2. (20%)

I am Alpha and x is 4
I am Beta and y is 2
I am Alpha and x is 6
I am Beta and y is 4
I am Alpha and x is 10
I am Gamma and y is 6
I am Alpha and x is 12
I am Gamma and y is 8

3. (35%)

a. (10%)

```
   public StringList () {
        StringNode p = new StringNode();
        first = p;
        last = p;
        length = 0;
   }
```

b. (10%)

```
  public void prepend (String value) {
        StringNode p = new StringNode(value);
        p.next = first.next;
        first.next = p;
        if (first == last) last = p;
        length++;
  }
```

c. (15%)

```
  public int count (char firstChar) {
        StringNode p = first.next;
        Int numNodes = 0;
        while (p != null) {
                if (p.data.charAt(0) == firstChar)
                        numNodes++;
                p = p.next;
        }
```

```
        return numNodes;
```

4. (25%)

1.   ActionListener
2.   MainWindow
3.   actionPerformed
4.   "Succeed"
5.   "Sorry! You failed."