

PART A:

```
public class SubstringChecker implements Checker
{
    private String goalString;

    public SubstringChecker(String goal)
    {
        goalString = goal;
    }

    public boolean accept(String text)
    {
        return (text.indexOf(goalString) != -1);
    }
}
```

PART B:

```
public class AndChecker implements Checker
{
    private Checker checker1;
    private Checker checker2;

    public AndChecker(Checker chk1, Checker chk2)
    {
        checker1 = chk1;
        checker2 = chk2;
    }

    public boolean accept(String text)
    {
        return checker1.accept(text) && checker2.accept(text);
    }
}
```

PART C:

```
yummyChecker = new AndChecker(new NotChecker(aChecker),  
                                new NotChecker(kChecker));
```

Alternate:

```
Checker nart = new NotChecker(new SubstringChecker("artichokes"));  
Checker nkal = new NotChecker(new SubstringChecker("kale"));  
Checker yummyChecker = new AndChecker(nart, nkal);
```

Question 4: Checker Objects (Design)

Part A:	SubstringChecker	4 points
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- +1/2 `class SubstringChecker implements Checker`
- +1/2 declare private instance variable of type `String`
- +1 constructor
 - +1/2 `SubstringChecker(String goalString)`
 - +1/2 initialize instance variable to parameter
- +2 accept method
 - +1/2 `public boolean accept(String text)`
 - +1 1/2 determine whether to accept
 - +1/2 attempt to find instance variable in `text`
(either call `indexOf`, `contains`, or compare with substrings)
 - +1 return correct boolean value in all cases

Part B:	AndChecker	4 points
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- +1/2 `class AndChecker implements Checker`
- +1/2 declare private instance variable(s) capable of storing two `Checker` objects
- +1 constructor
 - +1/2 `AndChecker(Checker c1, Checker c2)`
 - +1/2 initialize instance variable(s) to parameters
- +2 accept method
 - +1/2 `public boolean accept(String text)`
 - +1 1/2 determine whether to accept
 - +1/2 attempt to call `accept(text)` on both stored `Checkers`
 - +1 return correct boolean value in all cases

Part C:	yummyChecker	1 point
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- +1 correctly assign `yummyChecker`