

# BCPR282 SYNTAX TEST # 1A

Name \_\_\_\_\_ mark out of 10 \_\_\_\_\_

Markers \_\_\_\_\_

***Closed book, closed directory, no notes, individual test.***

Complete the following programming task:

Write a method called checkNumber in an Ex03 class which returns **Odd** if a passed parameter is odd and **EVEN** if a passed parameter is even.

The output shall look like:

**STARTING**

```
0 is an EVEN number
1 is an Odd number
2 is an EVEN number
3 is an Odd number
4 is an EVEN number
5 is an Odd number
6 is an EVEN number
7 is an Odd number
8 is an EVEN number
9 is an Odd number
10 is an EVEN number
BYE!
```

In a controller class use a loop to test the method in with the numbers from 0 to 10.

## MARKING GUIDE

- ☐ WORKS (with a **for** loop)
- ☐ Used the code in **ConsoleView** for input and output
- ☐ Added the **View** interface needed for ConsoleView
- ☐ Has a public main controller
- ☐ Has an exercise controller which inherits from the provided **Controller** class
- ☐ Has a model class
- ☐ Builds an instance of the model class
- ☐ Correct formatting - of { }
- ☐ Correct naming conventions - classes, Interfaces, methods, attributes and namespaces
- ☐ Correct indentation

Use the code on the following page (reformatting as necessary to get marks)

```

public class ConsoleView implements View {

    Scanner in = new Scanner(System.in);

    @Override
    public String get( String prompt ) {
        this.say( prompt + ">" );
        String input;
        System.out.println(">");
        input = in.nextLine();
        return input;
    }

    @Override
    public String get() {
        this.say( ">" );
        String input;
        input = in.nextLine();
        return input;
    }

    @Override
    public <T> void say(T message) {
        System.out.println(message);
    }

    @Override
    public void start() {
        System.out.println("STARTING");
    }

    @Override
    public void stop() {
        //scanner.close();
        System.out.println("BYE!");
    }

}

```

```
public abstract class ExerciseController {  
    protected View myView;  
    private String data;  
  
    public ExerciseController( View theView ){  
        this.myView = theView;  
    }  
  
    abstract protected void doStuff();  
  
    public void go() {  
        this.myView.start();  
        this.doStuff();  
        this.myView.stop();  
    }  
}
```