What Teams Need to Know!
WELCOME!

We want you to have a great experience at our 34th Annual High School Programming Competition! As you know a team of our Computer Science students at the College of Charleston is the reigning Champions of the ACM ICPC Programming Competition (Division II, Southeast Region), beating 61 other teams from 18 other universities at the November 2015 event. The team coach, Dr. Sebastian van Delden, is coordinating this year’s High School Programming competition and below he provides some information which will help you do well.

PROGRAMMING ENVIRONMENT

You can develop your programs in Python 3 or Java 1.5 or higher. You must use the IDEs that are installed on the College’s computers. For Python, we have IDLE 3.4.2, and for Java, we have BlueJ 3.1.1. For Java, we also have Eclipse MARS and Netbeans 8.0. You will be expected to know how to create a project and compile/run programs in at least one of these IDEs.

INPUT/OUTPUT

Your programs will be automatically graded by an online system – the same system used by the worldwide ACM ICPC programming competitions. How you get input and output into and out of your program must be done exactly how the problems dictate, and it must be done using “standard” input/output, meaning keyboard and console. In Python 3, this means using the input() and print() functions, and for Java this means using a Scanner object with System.in parameter, and System.out.print() or System.out.println(). Screen shots of IDLE/BlueJ along with the standard input/output syntax is shown at the end of this document.

STRATEGY

The setup of our competition is just like the worldwide competition: a timed competition based on the correctness of your programs’ outputs based on the inputs. Syntactic style is not considered. The team that completes the most problems in the minimal amount of time wins. If you submit an incorrect program, you will be docked 20 minutes.

You will be presented 8-10 problems. Some of them will be easy and some harder. To solve some of the problems, you just need to know if/while/for statements and variables, while other problems will require knowledge of 1D/2D arrays, String manipulation, data conversion (casting/etc), and built-in Math functions (like sin, cos, square root, etc). Very few if any problems will require knowledge of data structures and object oriented programming.

Easy or hard, the problems are all worth the same amount of points. So, you should try to identify and solve the easy ones first. This is a timed competition and you have 3 team members... So if one person is coding, the other two should be trying to solve the next problem (on paper).
Example Screen shot of the BlueJ with Java environment with input/output statements:

```java
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner myScan = new Scanner(System.in);
        System.out.print("Name: ");
        String name = myScan.next();
        System.out.println("Hello " + name);
    }
}
```
Example Screen shot of the IDLE with Python 3 environment with input/output statements:

```python
def hello():
    name = input("Name: ")
    print("Hello " + name)
```