### **SIENA COLLEGE**

**28th Annual** High School Programming Contest

##### **March 27, 2015**

**Problem #2: SIMPLIFIED POKER**

Background Information: While most poker games involve five-card hands, we will use only four cards in this problem. We will not consider flushes and straights which means the following are the only possible types of hands:

Four-of-a-Kind (all four cards of the same rank)

Three-of-a-Kind (three cards of the same rank and one card different)

Two-Pairs (two cards of the same rank and the other two cards of the same rank

but different than the first pair)

One-Pair (two cards of the same rank and two non-matching cards)

No-Matches (all four cards of different ranks)

Since we are ignoring flushes, the suits of the cards are irrelevant. Thus, only the rank of the cards will be given. Ranks will a single integer from 2 to 14. (So 11 = jack, 12 = queen, 13 = king, 14 = ace.) The cards will be presented in ascending order.

Your program will input the rank of four cards and output the type of hand it is. The output must be one of the five types, using the **exact text** shown above.

Programming Problem:

Input: Four integers in the range 2 to 14 inclusive, in ascending order.

The four integers will be on one line, separated by spaces.

Output: One of the five hand types shown above, on a line by itself.

Example 1: Input: 7 7 7 7

Output: Four-of-a-Kind

Example 2: Input: 3 9 9 9

Output: Three-of-a-Kind

Example 3: Input: 2 4 4 6

Output: One-Pair

Example 4: Input: 10 11 12 13

Output: No-Matches