Problem solving Club

Introduction

Introduction

- Competitive Programming Club
- Contest
  - ACPC: Oct 15
  - CCPC: Winter Semester
- Workshops
  - Getting Started With CPSC: Friday Sep 23
- Leaderboard
  - Free Lunch With the CTO of Arcurve
- Website: http://www.psc.cpsc.ucalgary.ca/

Beginner Problem Solving

- What is competitive programming?
- What is required?
- 3 main practice sites
  - Kattis http://open.kattis.com/
  - Codeforces http://codeforces.com/
  - UVA https://uva.onlinejudge.org/
- Programming Languages?
  - Any!
- Development Environments?
  - Any!

Beginner Problem Solving - Continued

- Format of a generic problem
  - Problem Description
  - Sample input
    - Constraints
  - Sample output
    - Constraints
- Format of a generic solution
  - Take input - scanner, cin, input()
  - Process input - Math, Graph theory, Dynamic Programming
  - Print output - System.out.print, cout, print()
- https://open.kattis.com/problems/spavanac

Solving your first problem!

- Make an account on https://open.kattis.com/
- Take the input
  - 2 integers
  - int hours
  - int minutes
- Process input
  - Logic?
- Output answer
  - Print hours + " " + print minutes

Solution

Main.java

```java
import java.util.*;
public class Main{
    public static void main (String[] args){
        Scanner input = new Scanner(System.in);
        int h = input.nextInt();
        int m = input.nextInt();

        int timeDif = 45;

        if (m - timeDif < 0){
            if (h == 0){
                h = 23;
                m = 60 - (timeDif - m);
            }else{
                h = h-1;
                m = 60 - (timeDif - m);
            }
        }else{
            m = m -timeDif;
        }

        System.out.print(h+" "+m);
    }
}
```

Workshops Planned

- Getting Started With CPSC: This Friday!
- Source Control
- Internship Q&A
- Paths in CPSC
- Android