ITP20003 Java Programming

Lab 3. Take Control

Lab 3

- Teams for Lab 3

- Two examples
    - BouncingBall
    - FilePrint

- Mission 5
    - work as a team

| Team1	박혜빈	이종원
Team2	김지민	김아론
Team3	김예군	백주열
Team4	전혜원	김시온
Team5	이지행	김재윤
Team6	김소은	박수현
Team7	유채우	이한빈
Team8	양예진	윤석규
Team9	이혁재	심충일
Team10	Wongani	황보효정

Bouncing Ball

- BouncingBall shows a black ball moving and bouncing when it hits at a wall
  - The program receives an initial location of a ball and a direction of its move as command-line arguments
  - A ball moves 1 pixel up/down and/or 1 pixel left/right per 100 micosec

FilePrint

- FilePrint receives a text file name with options and then prints on the screen the content of the file according to the given options
    - Usage: `FilePrint [Option]... [File name]`
    - FilePrint can receive multiple options in any order, as command-line arguments

- Options
    - An option starts with dash (-) and a character follows. Depending on the character, an option is followed by one or multiple words of parameters
    - Cases
        - `-n, -l`   print the line number in front of each line
        - `-b <X>`   print from line `<X>`
        - `-i <X>`   indentation with `<X>` white-spaces
        - `-f`   print the file name in front of each line

M5. Gomoku 오목

- Complete Gomoku.java for two players playing Gomoku
  - The board should be displayed in a GUI window
  - The players give commands with keyboard (via standard input)

- Functionalities
  - There are two players are one with black stones and one with white stones.
  - The game starts with an empty 9x9 board on which 81 point are named as $A1$ to $I9$
  - The player with the black stone is the first mover
  - Each player gives a move in turn by giving a stone position via keyboard
    - A player gives any stone position as long as the position is not already taken
    - When a player gives a wrong input for a position, the program should ask it again until the player gives a valid one
  - For each input, the board should be updated with the latest stone arrangement
  - As soon as a player wins, the program should print out a message "Black wins" or "White wins" right above the board. And then, the program should not receive any further input from the players
    - A player wins by a move when the move first makes 5 or more stones sit continuously in a row or column or diagonal line at the first time in the game
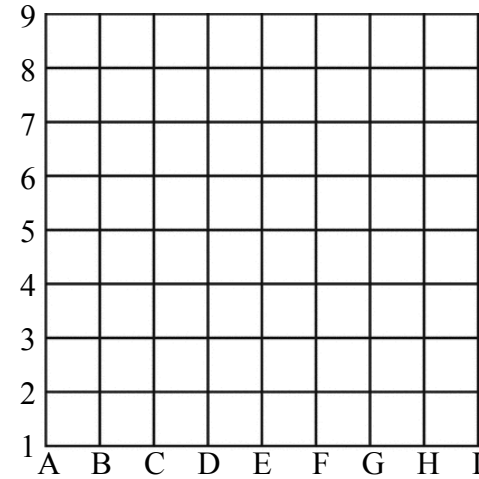
Note

- Make decisions by yourself for the details that the specification is silent on

- Use the GUI primitives covered in the class only
  - Never bring fancy GUI things

- Try best not to left any unnecessary things in your code

- Name each variable as clear as you can