Week 7 Lab

Question 1

Create a class Game with the following using the concept of **Encapsulation**:

- Instance variables: name and version *(make the variables private)*
- Parameterized constructor with name as parameter
    - Assign the value of name in instance variable using this keyword
- Getter (accessor) methods for both name and version
- Setter method for version.
- print(): print the values of all variables

Create a class CounterStrike **inheriting** Game class with the following:

- Instance variable: numberOfPlayers *(make the variables private)*
    - Parameterized constructor with name and numberOfPlayers as parameters
        - Call super constructor by passing name as parameter
        - Assign the value of numberOfPlayers in instance variable using this keyword
    - Create getter and setter methods for numberOfPlayers
    - print()
        - Call super class's print method
        - Print the value of numberOfPlayers

Run the program using following steps:

- In BlueJ, create an object of CounterStrike *(You have to input the name and numberOfPlayers value)*
- Call setter method of version by passing the version value *(Right click in object and call setVersion method)*
- Call print method *(Right click in object and call print method)*

Question 2

- Write a pseudocode for Question 1.
- Create class diagram for Question 1.

Question 3

Write a program to:

- Input 5 numbers and store them in an array
- Find the greatest number and print it.
- Find the smallest number and print it.

Question 4

Write a program to:

- Create two arrays to store the odd and even numbers
- Input 10 numbers using any loop
    - Check if the input number is odd or even
    - If the number is odd, store the number in odd array
    - Else if the number is even, store the number in even array
- Print the odd numbers and even numbers from the array