CSc 1301: PRINCIPLES OF COMPUTER SCIENCE

Lab 08 - User Input using Scanner Class

***You should submit 1 java files: lab8.java***

***In lab8.java, you need includes 4 method PrintSquare***

***GradeAverage***

***Add2Integers***

***SumProductMinMax3***

**Receiving input from the user**

* To make a program more interactive, input from the user can be received in the program.
* To do so, we use an object/variable of the **Scanner** class -- a library class pre-defined in Java, in the java.util package.  So we must first "**import**" the class into the program.
* Then the user's input is read in by the methods:
  + next() -- for a String; will stop read at “space” position
  + nextInt() -- for an integer (a whole number)
  + nextDouble() -- for a decimal number
  + nextline()—for a line including space

**Program 1**

Write a java method name ***PrintSquare*** which reads in an integer that is typed in by the user and then computes and prints the square of that integer.

Hint\*\*\*\*\*\*\*\*\*\*

When you run this program, it will

1. Display the message "Please type a number:"
2. Reads in the user input
3. compute the square
4. Display the message “The square of that number is " and concatenate the variable that is used to store the valued squared

**Program 2**

Write a java method name **GradeAverage** that using the Scanner class. This program will take the grades of a student in three subjects. The prograam will take the average and display the average of all the 3 grades entered.

**Sample outputs.**

**Enter your name: Mark**

**Enter marks in three subjects: 100 98 99**

**Name: Mark**

**Average: 99.0**

**Program 3**

Write a method called **Add2Integers** that prompts user to enter two integers. The program shall read the two integers as int; compute their sum; and print the result. For example,

Enter first integer: **8**

Enter second integer: **9**

The sum is: 17

**Program 4**

SumProductMinMax3 (Arithmetic & Min/Max)

Write a method called **SumProductMinMax3** that prompts user for three integers. The program shall read the inputs as int; compute the sum, product, minimum and maximum of the three integers; and print the results. For examples,

Enter 1st integer: **8**

Enter 2nd integer: **2**

Enter 3rd integer: **9**

The sum is: 19

The product is: 144

The min is: 2

The max is: 9