**Computer Science 2**   **Lab # 02-B**



**Dr. Hanh Pham**

**Student Last Name: Carrasquillo Student First Name: Ariana**

**CS2 Section # 03**

**Due:** Problem A by the **end of the lab** and Problems B by the end of **Saturday** of the same week.

**Project B: FindFutureDates**

**Problem Description:**

1) (Find future dates) Write a [program](https://pearson.turingscraft.com/codelab/jsp/core_dhtml.jsp?) that prompts the user to enter an [integer](https://pearson.turingscraft.com/codelab/jsp/core_dhtml.jsp?) for today’s day of the week (Sunday is 0, Monday is 1, ..., and Saturday is 6). Also prompt the user to enter the number of days after today for a future day and display the future day of the week.

**Analysis:**

(Describe the problem including input and output in your own words. Type your answer in the following with **BLUE font color**)

|  |
| --- |
| **The user will input a day of the week using a number 0-6 (representing the days of the week) and also input a number of days that have gone by between today’s day a potential future day. The output is the future day of the week** |

**Design:**

(Describe the major steps for solving the problem. Type your answer in the following with **BLUE font color**)

|  |
| --- |
| 1. **Import scanner** 2. **Ask user for today’s day and number of elapsed days, save into separate variables** 3. **Calculate the future day by adding today’s day and the days elapsed and using (%7) because there are 7 days in the week** 4. **Use 1 switch statement to get today’s day and 2nd switch statemenr for the future day.** |

**Coding:** (Copy and Paste Source Code here. Type your answer in the following with **BLUE font color**)

|  |
| --- |
| import java.util.Sacanner;  public class FindFutureDates{  public static void main(String[] args){  Scanner input = new Scanner(System.in);    System.out.print("Enter Today's Day: ");  int today = input.nextInt();    System.out.print("Enter the number of days elapsed since today: ");  int elapsedDays = input.nextInt();    //find the future day  int futureDay = (today + elapsedDays) % 7;    System.out.print("Today is ");    **//switch to display the day of the week**  **switch(today){**  **case 0: System.out.print("Sunday"); break;**  **case 1: System.out.print("Monday"); break;**  **case 2: System.out.print("Tuesday"); break;**  **case 3: System.out.print("Wednesday"); break;**  **case 4: System.out.print("Thursday"); break;**  **case 5: System.out.print("Friday"); break;**  **case 6: System.out.print("Saturday"); break;**  **default: System.out.print("Unknown day");**  **}**    **System.out.print("and the future day is ");**    **//switch to display the future day of the week**  **switch(futureDay){**  **case 0: System.out.print("Sunday"); break;**  **case 1: System.out.print("Monday"); break;**  **case 2: System.out.print("Tuesday"); break;**  **case 3: System.out.print("Wednesday"); break;**  **case 4: System.out.print("Thursday"); break;**  **case 5: System.out.print("Friday"); break;**  **case 6: System.out.print("Saturday"); break;**  **default: System.out.print("Unknown day");**  **}**  **}**  **}** |