

SPRING 2020 -1301
(3RD JAVA PROGRAMING EX)
THERE ARE 3 PARTS

Due Apr 7th 2020 @ 11:59pm

Topics: (nested-if, switch-case): NO loops is allowed for this homework

- Make sure your program is properly indented. Your program only needs to have a main method.

After you have written it, compile it and run it to make sure it works.

Then submit to icollege your .java file only. I do not need the .class file for this assignment.

Please use this heading format

```
////////////////////////////////////  
// Solution to Programming Project 3 homework #4      //  
// Name:                                              //  
// Lab time:                                           //  
// Program description:                               //  
////////////////////////////////////
```

Program #1: Write a program which will use user input. The program should be called **PrintNumberToWordie** which prints "ONE", "TWO", ..., "FIVE" UP to TEN if the int variable "number" is 1, 2, ..., 5, 10, respectively be sure to code for the else/default option if no match is found. This program must Use (a) a "nested-if" statement to complete; (b) Secondly the program must have an additional if statement to check to see if the user input is divisible by 2.

Program #2: Convert Program #1 into using some sort of switch- case statement this program should be name **PrintNumberToWordie2**

Hints:

```
/*
 * Trying nested-if and switch-case statements.
 */
public class PrintNumberInWord { // Save as "PrintNumberToWordie.java"
    public static void main(String[] args) {
        int number = 5; // Set the value of "number" here!

        //Using nested-if
        if (number == 1) {
            System.out.println( ..... );
        } else if ( ..... ) {
            .....
        } else if ( ..... ) {
            .....
            .....
        } else {
            .....
        }

        //Using switch-case to do the same
        switch(number) {
            case 1: System.out.println( ..... ); break; // Don't forget "break"
            case 2: System.out.println( ..... ); break;
            .....
            .....
            default: System.out.println( ..... );
        }
    }
}

//Demo sample for user input
//Use as a guide

import java.util.Scanner;
```

```
class IfElse_Demo {
    public static void main(String[] args) {
        int marksObtained, passingMarks;

        passingMarks = 40;

        Scanner input = new Scanner(System.in);

        System.out.println("Input marks scored by you");

        marksObtained = input.nextInt();

        if (marksObtained >= passingMarks) {
            System.out.println("You passed the exam.");
        }
        else {
            System.out.println("Unfortunately, you failed to pass the exam.");
        }
    }
}
```

Program #3: Write a user input program using **if else statements** ONLY name of program "Magic number" the user will try guess the Magic number. The user will enter the number to guess and computer will tell the user if the number matches the Magic number and then determine if the number is smaller or greater than the initial number. The Number that is guessed must be of type int and use Math.random() function to give it random value in range 1 thru 100.

Hint**

```
// Var  
Declarations Code  
goes here  
//Scanner input  
Code goes here  
  
//check Code logic below  
  
if ()  
    System.out.println("");  
  
    else if()  
  
        System.out.println("");  
  
    else if()  
  
        System.out.println();
```

EXPECTED OUTPUT

```
Secret number is  
50 Enter a guess:  
50 Your guess is  
50  
Your guess is correct. Congratulations!
```

```
Secret number is  
99 Enter a guess:  
19 Your guess is  
19  
Your guess is smaller than the secret number.
```

```
Secret number is  
72 Enter a guess:  
89 Your guess is  
89  
Your guess is greater than the secret number.
```