

Put all java programs in one folder named HW4 and zip. Submit only the zipped folder.

Problem 1-Fix code Submit a working program called: Fluffy.java

Fix the following code so that the program runs. The comments (in red) tell you what the code **should** be doing.

```
import java.util.Scanner;

public class Fluffy
{

    public static void main(String[] args)
    {

        String s="The big fluffy dog likes kibbles and bits";

        //turn the String s into an array of words
        char [] splitS=s.split(" ");

        //check if the last word in splitS is bits (boolean value will be true if the last word is bits)
        boolean check=splitS.length()-1.equals("bits");

        //check length of splitS array
        int len=splitS.length();

        //print out variable len
        System.out.println("Length: %c"+len+);

        //output the third word in the splitS array (should be fluffy)
        System.out.println(s[3]);

        //print out the array splitS
        for (int i=0;i<splitS.length+1; i++)
        {
            System.out.println(splitS[i]);

        }

    }
}
```

Problem 2-Write methods Submit a program called: NumeroDeux.java

Complete the following program by writing in the methods. Make sure that the code matches the sample run and make sure not to hardcode any part of the sample run since we will be using other examples as well. DO NOT MODIFY THE MAIN METHOD-only write in the methods (where it says **write code here**). You will turn in the **whole program**.

```
import java.util.Scanner;
```

```
public class NumeroDeux
```

```
{  
    public static int getUserNum(String message)  
    {  
        //write code here  
    }  
}
```

```
public static String getUserString(int n)  
{  
    //write code here  
}
```

```
public static boolean checkNumLength(int a, int check1, int check2)  
{  
    //write code here  
}
```

```
public static void main(String[] args) //DO NOT MODIFY  
{
```

```
    boolean choice=true;  
    int userIn=0;  
    while(choice)  
    {  
        userIn=getUserNum("Enter a number between 4-6:");  
        choice=checkNumLength(userIn, 4, 6);  
    }
```

```
String input=getUserString(userIn);
```

```

choice=true;
int userIn2=0;

while(choice)
{
    userIn2=getUserNum("Enter another number (for substring) between 1-3:");
    choice=checkNumLength(userIn2, 1, 3);
}

System.out.println(input.substring(0,userIn2));

}
}

```

SAMPLE RUN:

```

Enter a number between 4-6:3
Enter a number between 4-6:8
Enter a number between 4-6:4
Enter a word at of length 4: dogg
Enter another number (for substring) between 1-3:3
dog

```

Problem 3-Write a program [Submit a program called: EvenOdd.java](#)

Lärs wants to create a program that asks a user to first enter an **even** number (continuing to prompt the user for an even number if they do not actually enter an even number). Afterwards, he wants the user to enter an **odd** number (once again, continuously prompting the user if they do not at first enter an odd number). Once the user has done this, he wants the program to exit saying: *****Thanks! Bye!*****

He wants to use the following methods (no credit if methods are not used):

```

public static int getUserInput(String message)
public static boolean checkIfEven(int n)

```

(Feel free to create any additional helper methods).

Sample Run:

```

--Enter an even number:
7
That is not even. Enter an even number.
9

```

That is not even. Enter an even number.

4

--Ok thanks! Now enter an odd number:

4

That is not odd. Enter an odd number.

8

That is not odd. Enter an odd number.

9

****Thanks! Bye!****

Problem 4 -Write a program Submit a program called: FinalGrade.java

Create a grade calculator for this class that says whether the final grade is A, B, C, D or F once you enter all grades. Do not include things such as bonus points or extra points on the final grade. ****Hint: You may find it helpful to look up information on my posted syllabus (the weights of HWs, tests and other contributions to your final grade).***

You should use the methods we created in class since most of the actual work of the program has been done for you. In addition to these methods, you should create another method that prints out your letter grade based on your final numerical grade.

Methods used in class:

int [] enterInput(String message, int size)

double getAvg(int [] a)

double getWeightedGrade(int percent, double avg)

Create yourself:

void letterGrade(double g)

This method takes in a number (your final grade) and prints out the letter value associated with it. It does not return anything.

Sample run:

CSE 1310 grade calculator!

Please enter test grades:

Enter grade 1:

99

Enter grade 2:

78

Enter grade 3:

89

Please enter HW grades:

Enter grade 1:

100

Enter grade 2:

98

Enter grade 3:

78

Enter grade 4:

45

Enter grade 5:

100

Enter grade 6:

89

Enter grade 7:

92

Enter grade 8:

91

Please enter quiz grades:

Enter grade 1:

89

Enter grade 2:

77

Enter grade 3:

100

Enter grade 4:

100

Enter grade 5:

57

Please enter final exam grade:

Enter grade 1:

78

Total grade is: 85.41

You made a B!