Stack Questions

1. Create a stack that contains the letters of your name. Add your last name or repeat the letters until you have pushed 10 letters. You will need to push each letter separately. Print the Stack on the screen using a loop.

2. Print every second element of the Stack on the screen. (print a title first to explain which question you are answering).

3. Print the Stack on the screen, flipping the first two items.

4. Find the maximum element in the stack:
    https://www.youtube.com/watch?v=ISAP1S0hoFw

```java
public class StackQuestions {
      public static void main(String args[]) {
            new StackQuestions();
      }
      public StackQuestions() {
            //To do: Make a new Stack, add 10 letters from your name.

            //Print every item in the Stack, using a loop
            System.out.println("Print every item in the Stack using a loop:");

            //To do: re-add 10 letters from your name to the Stack

            //Print every second item in the Stack on the screen
            System.out.println("Print every second item in the Stack:");

            //To do: re-add 10 letters from your name to the Stack

            //Flip the first two items in the Stack when you print them out.
            System.out.println("Flip the first two items:");

            //To do: re-add 10 letters from your name to the Stack

            //Find the maximum
            System.out.println("Find the maximum:");

      }
}
```

A Char Stack Class

```java
public class StackChar
{
    private int count;
    private char data[] = new char [50];
    public StackChar ()
    {
        count = 0;
    }


    public void push (char addMe)
    {
        data [count] = addMe;
        count++;
    }


    public int size ()
    {
        return count;
    }


    public boolean isFull ()
    {
        return (count == 50);
    }


    public char pop ()
    {
        count--;
        return data [count];
    }


    public char peek ()
    {
        return data [count--];
    }


    public boolean isEmpty ()
    {
        return count == 0;
    }
```

```java
    public void clear ()
    {
        count = 0;
    }
}
```