

Make Your Stack Class

Video: <https://youtu.be/YtkzbNsYifw>

To Do:

- Change the length of the array to your number of cards
- Add in each of your arrays (Excel: <https://youtu.be/MVShoiUx2Z0>, Excel to Java: <https://youtu.be/iNS7gBtVuDA>)
- Add in a temp swap for each of your arrays
- Make sure the Card constructor call matches yours

```
public class Deck {
    private int count;
    //TO DO: make the length that matches your number of cards
    private Card data[] = new Card[4];

    public Deck() {
        shuffle();
    }

    public void shuffle(){
        //TO DO: Make an array for each instance variable. A card's pieces
        are all in the same index
        String cat[] = {"At a restaurant", "Fill in the blank", "Movies", "Bugs"};
        String q1[] = {"An appetizer", "Stop and ___", "A movie about college", "A bug with wings"};
        String q2[] = {"A way potatoes are prepared", "Twist and ___", "A pirate movie", "A bug that stings"};
        String q3[] = {"A dessert", "Stars and ___", "A movie with a wizard", "A tiny bug"};
        String q4[] = {"A kind of vegetable", "Eat and ___", "A movie set in high school", "A bug with spots"};
        //TO DO: Randomize the order of the arrays
        for (int i = 0; i < 100; i++) {
            int r1 = (int) (Math.random() * cat.length);
            int r2 = (int) (Math.random() * cat.length);
            //TO DO: one swap for each array
            String temp = cat[r1];
            cat[r1] = cat[r2];
            cat[r2] = temp;
            String temp1 = q1[r1];
            q1[r1] = q1[r2];
            q1[r2] = temp1;
            String temp2 = q2[r1];
            q2[r1] = q2[r2];
            q2[r2] = temp2;
            String temp3 = q3[r1];
            q3[r1] = q3[r2];
            q3[r2] = temp3;
            String temp4 = q4[r1];
            q4[r1] = q4[r2];
            q4[r2] = temp4;
        }
        count = 0;
        //TO DO: push all (now in random order) into the Deck
    }
}
```

```
        for (int i = 0; i < cat.length; i++) {
            Card c = new Card(cat[i], q1[i], q2[i], q3[i], q4[i]);
            push(c);
        }

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

    public int size() {
        return count;
    }

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

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

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

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

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