Class ArrayRecursor

```java
import java.util.Scanner;
public class ArrayRecursor {
    //Main method
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int arr[] = new int[10];
        for(int i = 0; i < arr.length; i++)
            arr[i] = -1;
        int choice;
        do {
            System.out.println("1) Fill a new array.");
            System.out.println("2) Count elements.");
            System.out.println("3) Count sum of elements.");
            System.out.println("4) Print the array.");
            System.out.println("5) Print the array in reverse.");
            System.out.println("6) Quit.");
            System.out.print("Enter a choice: ");
            choice = input.nextInt();
            switch(choice) {
            case 1:
                for(int i = 0; i < arr.length; i++)
                    arr[i] = -1;
                int x = fill(arr);
                System.out.println("You entered " + x + " numbers.");
                break;
            case 2:
                System.out.println("Number of elements is: " + count(arr));
                break;
            case 3:
                System.out.println("The sum of elements is: " + sum(arr));
                break;
            case 4:
                print(arr);
                break;
            case 5:
                printReverse(arr);
                break;
            case 6:
                System.out.println("Good Bye!");
                break;
            default:
                System.out.println("Invalid choice!");
                break;
            }
        }while(choice != 6);

    }
```

```java
public static int fill(int arr[]) {
    Scanner s = new Scanner(System.in);
    return fill(arr, 0, s);
}

private static int fill(int arr[], int start, Scanner input) {
    if(start == arr.length) return 0;
    System.out.print("Enter number " + (start+1) + ": ");
    int num = input.nextInt();
    if(num == -1) return 0;
    arr[start] = num;
    return 1 + fill(arr, start+1, input);
}

public static int count(int arr[]) {
    return count(arr, 0);
}

private static int count(int arr[], int start) {
    if(start == arr.length || arr[start] == -1) return 0;
    return 1 + count(arr, start+1);
}

public static int sum(int arr[]) {
    return sum(arr, 0);
}
private static int sum(int arr[], int start) {
    if(start == arr.length || arr[start] == -1) return 0;
    return arr[start] + sum(arr, start+1);
}

public static void print(int arr[]) {
    System.out.print("[");
    print(arr, 0);
    System.out.println("]");
}
private static void print(int arr[], int start) {
    System.out.print(arr[start]);
    if (start + 1 != arr.length && arr[start+1] != -1){
        System.out.print(", ");
        print(arr, start+1);
    }
}
```

```java
    public static void printReverse(int arr[]) {
        System.out.print("[");
        printReverse(arr, 0);
        System.out.println("]");
    }
    private static void printReverse(int arr[], int start) {
        if (start + 1 != arr.length && arr[start+1] != -1){
            printReverse(arr, start+1);
            System.out.print(", ");
        }
        System.out.print(arr[start]);
    }

}
```