

CS101
Dec. 3, 2015

Introduction to Arrays =====

```
public class ArrayIntro{
    public static void main(String[] args){

        int[] midterm = new int[10];
        midterm[0] = 100;
        midterm[1] = 80;
        for( int i = 0; i< midterm.length; i++){
            System.out.println("    " + i + "    "+ midterm[i]);
        }
        int avg = (midterm[0] + midterm[1])/2;
        System.out.println(avg);
        System.out.println(avgScore(midterm));

    }

    public static double avgScore( int[] testScore){

        double sum = 0.0;
        for(int i = 0; i< testScore.length; i++){
            sum = sum + testScore[i];
        }
        return sum/testScore.length;
    }
}
```

Bubble Sort =====

```
import java.util.Scanner;
public class BubbleSortClass{
    public static void main(String[] args){
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter Your ARRAY size");
        int arraySize = scan.nextInt();

        int[] numbers = new int[arraySize];
        for( int i = 0; i < numbers.length; i++){
            numbers[i] = (int) (Math.random()*100);
            //System.out.println(numbers[i]);
        }
        BubbleSort(numbers);
        System.out.println();
        for( int i = 0; i < numbers.length; i++){

            //System.out.println(numbers[i]);
        }
    }
}
```

```

    }
}
public static void BubbleSort(int[] num){

    boolean flag = true;
    int temp;
    while(flag)
    {
        flag = false;
        for(int i = 0; i < num.length-1; i++){
            if(num[i] > num[i +1]){

                temp = num[i];
                num[i] = num[i +1];
                num[i+1] = temp;
                flag = true;
            }
        }
    }
}
}

```

Array List

=====

```

import java.util.ArrayList;
public class ArrayListFriends{
    public static void main(String[] args){
        ArrayList<String> friends = new ArrayList<String>();
        friends.add("Alper");
        friends.add("Alihan");
        friends.add("Emre");
        friends.add("Furkan");
        friends.add("Mert");
        System.out.println("size : " + friends.size());
        System.out.println("2nd one : " + friends.get(1));
        System.out.println(friends);

        friends.remove(3);
        System.out.println();

        System.out.println(friends);
    }
}

```

Array List Friend

=====

```
import java.util.ArrayList;
public class ArrayListFriends{
    public static void main(String[] args){
        ArrayList<String> friends = new ArrayList<String>();
        ArrayList<String> friends2 = new ArrayList<String>();
        friends2.add("Mahmut");
        friends2.add("Murat");
        friends2.add("Baran");

        friends.add("Alper");
        friends.add("Alihan");
        friends.add("Emre");
        friends.add("Furkan");
        friends.add("Mert");
        //System.out.println("size : " + friends.size());
        System.out.println(friends);
        System.out.println(friends2);
        for(String name : friends2 ){
            friends.add(name);

        }
        System.out.println(friends);

        /*System.out.println(friends);
        System.out.println("2nd one : " + friends.get(1));
        friends.set(1,"Fazl?");
        System.out.println(friends);
        /*
        friends.remove(3);
        System.out.println();

        System.out.println(friends);

        ArrayList<String> names = friends;
        names.add("Edward");
        System.out.println(friends);
        friends.add(10, "Oya");
        System.out.println(friends);
        */
    }
}
```