### Universidad de las Fuerzas Armadas

CLASS NAME: OBJECT ORIENTED PROGRAMMING

PROFESSOR: EDISON LASCANO

**NRC**: 14575 **Workshop** #: 40

**TOPIC:** 

```
Rubric:
public class A {
                                       //0.5
  private ArrayList<A> as;
                                       //0.4
  //constructors
                                       //0.1
                                       //0.1
  //getters,setters
public class B extends A{
                                       //0.1
  private ArrayList<G> gs;
                                       //0.9
 //constructors
                                       //0.1
  //getters,setters
                                       //0.1
public class C extends A{
                                        //1
  private ArrayList<E> es;
                                       //0.9
  private E ess[];
                                       //0.3
 //constructors
                                       //0.1
  //getters,setters
                                       //0.1
public class D extends A {
                                       //1
  private E es[] = new E[5];
                                       //0.9
  private ArrayList<F> fs;
                                       //0.9
  //constructors
                                       //0.1
  //getters,setters
                                       //0.1
public class E {
                                       //1
  //extra attribut
                                       //-1
  //constructors
                                        //0.1
public class F {
                                       //1
  //extra attribut
                                       //-1
  //constructors
                                       //0.1
                                       //1
public class G implements H{
  public void f(J j){
                                        //1
                                         //1
  public J f(){
     return new J();
public interface H {
                                         //1
  public void m(J j);
                                        //1
                                         //1
public class J {
  public static void main(String[] args) { //0.5
                                        //0.1
                                       //0.1
     ArrayList<A> as;
     Bb;
                                       //0.1
```

ArrayList <b> bs;</b>	//0.1
C cs[] = new C[3];	//0.1
D ds[] = new D[4];	//0.1
Dd;	//0.1
E e;	//0.1
E[] ess = new E[5];	//0.1
ArrayList <e> es;</e>	//0.1
F f;	//0.1
ArrayList <f> fs;</f>	//0.1
ArrayList <g> gs;</g>	//0.1
G g;	//0.1
Jj;	//0.1

# RONY STIVEN CEDEÑO MONTOYA

Inspector: Jefferson Yépez

**Total:** 13.8

public class A {	0.5//0.5
private ArrayList <a> as;</a>	0.4//0.4
//constructors	0//0.1
//getters,setters	0//0.1
public class B extends A{	1//1
private ArrayList <g> gs;</g>	0.9//0.9
//constructors	0//0.1
//getters,setters	0//0.1
public class C extends A{	1 //1
private ArrayList <e> es;</e>	0.9//0.9
private E ess[];	0.3//0.3
//constructors	0//0.1
//getters,setters	0//0.1
public class D extends A {	1//1
private E es[] = new E[5];	0.9//0.9
private ArrayList <f> fs;</f>	0.9//0.9
//constructors	0//0.1
//getters,setters	0//0.1
public class E {	1//1
//extra attribut	0//-1
//constructors	0 //0.1
public class F {	1//1
//extra attribut	0//-1
//constructors	0//0.1
public class G implements H{	1//1
public void f(J j){	0 //1
}	
public J f(){	1//1

```
return new J();
  }
public interface H {
                                       1 //1
                                      0 //1
  public void m(J j);
public class J {
                                        1//1
  public static void main(String[] args) { 0//0.5
                                       0 //0.1
     ArrayList<A> as;
                                       0//0.1
     Bb;
                                      0//0.1
     ArrayList<B> bs;
                                      0//0.1
     C cs[] = new C[3];
                                      0//0.1
     D ds[] = new D[4];
                                      0//0.1
     Dd;
                                      0//0.1
     Ee;
                                      0//0.1
     E[] ess = new E[5];
                                      0//0.1
                                      0//0.1
     ArrayList<E> es;
     Ff;
                                      0//0.1
     ArrayList<F> fs;
                                      0//0.1
     ArrayList<G> gs;
                                      0 //0.1
                                      0//0.1
     Gg;
     Jj;
                                      0 //0.1
       DAVID GUSTAVO CEPEDA SALGUERO
       Inspector: Rony Cedeño
       TOTAL: 10.3
public class A {
                                      0.5//0.5
  private ArrayList<A> as;
                                      0.4//0.0
  //constructors
                                      0.1//0.0
  //getters,setters
                                      0.1//0.0
public class B extends A{
                                       1//1
  private ArrayList<G> gs;
                                      0.9//0.0
 //constructors
                                      0.1//0.0
  //getters,setters
                                      0.1//0.0
public class C extends A{
                                       1//1
  private ArrayList<E> es;
                                      0.9//0.9
  private E ess[];
                                      0.3//0.0
 //constructors
                                      0.1//0.0
  //getters,setters
                                      0.1//0.0
public class D extends A {
                                       1//1
  private E es[] = new E[5];
                                      0.9//0.5
                                      0.9//0.9
  private ArrayList<F> fs;
  //constructors
                                      0.1//0.0
                                      0.1//0.0
  //getters,setters
public class E {
                                       1//1
  //extra attribut
                                      -1//0.0
  //constructors
                                       0.1//0.0
                                       1//1
public class F {
  //extra attribut
                                      -1//0.0
```

```
//constructors
                                        0//0.0
public class G implements H{
                                        1//1
                                        1 //0
  public void f(J j){
  }
                                         1//0
  public J f(){
     return new J();
public interface H {
                                         1//1
                                         1//0
  public void m(J j);
public class J {
                                         1//0
  public static void main(String[] args) { 0.5//0.5
```

### MATEO GABRIEL CRIOLLO LLUMIQUINGA

Inspector: David Cepeda

**TOTAL: 9.55** 

```
public class A {
                                       0.5//0.5
  private ArrayList<A> as;
                                       0.4//0.4
  //constructors
                                       0.1//0.1
  //getters,setters
                                       0.1//0.1
public class B extends A{
                                       1//1
  private ArrayList<G> gs;
                                       0//0.9
 //constructors
                                       0.1//0.1
  //getters,setters
                                       0.1//0.1
public class C extends A{
                                       1 //1
  private ArrayList<E> es;
                                       0.6//0.9
                                       0//0.3
  private E ess[];
 //constructors
                                       0.1//0.1
  //getters,setters
                                       0.1//0.1
public class D extends A {
                                       1//1
  private E es[] = new E[5];
                                       0.5//0.9
  private ArrayList<F> fs;
                                       0.8//0.9
  //constructors
                                       0.1//0.1
  //getters,setters
                                       0.05//0.1
                                       1//1
public class E {
  //extra attribut
                                       0//-1
  //constructors
                                       0 //0.1
public class F {
                                       1//1
  //extra attribut
                                       0//-1
                                       0//0.1
  //constructors
public class G implements H{
                                       1//1
  public void f(J j){
                                       0 //1
                                         0//1
  public J f(){
     return new J();
```

```
}
public interface H {
                                      1 //1
  public void m(J j);
                                      0 //1
public class J {
                                       1//1
  public static void main(String[] args) { 0//0.5
                                      0 //0.1
    ArrayList<A> as;
                                      0//0.1
    Bb;
                                      0//0.1
    ArrayList<B> bs;
                                      0//0.1
    C cs[] = new C[3];
                                      0//0.1
    D ds[] = new D[4];
                                      0//0.1
    Dd;
                                      0//0.1
    Ee;
                                      0//0.1
    E[] ess = new E[5];
                                      0//0.1
     ArrayList<E> es;
                                      0//0.1
    Ff;
                                      0//0.1
    ArrayList<F> fs;
                                      0//0.1
    ArrayList<G> gs;
                                      0 //0.1
    Gg;
                                      0//0.1
    Jj;
                                      0 //0.1
```

### BRAYAN SEBASTIAN CRIOLLO VEGA

### **Inspector: Mateo Criollo**

public class A {	0.5//0.5
private ArrayList <a> as;</a>	0//0.4
//constructors	0//0.1
//getters,setters	0//0.1
public class B extends A{	1//1
private ArrayList <g> gs;</g>	0//0.9
//constructors	0//0.1
//getters,setters	0.1//0.1
public class C extends A{	1 //1
private ArrayList <e> es;</e>	0//0.9
private E ess[];	0//0.3
//constructors	0//0.1
//getters,setters	0.1//0.1
public class D extends A {	1//1
private E es[] = new E[5];	0//0.9
private ArrayList <f> fs;</f>	0//0.9
//constructors	0//0.1
//getters,setters	0.1//0.1
public class E {	1//1
//extra attribut	//-1
//constructors	0 //0.1
public class F {	1//1
//extra attribut	//-1
//constructors	0//0.1

```
public class G implements H{
                                       0//1
                                       1 //1
  public void f(J j){
                                        0 //1
  public J f(){
     return new J();
public interface H {
                                        0//1
  public void m(J j);
                                       0 //1
                                       1 //1
public class J {
  public static void main(String[] args) {0.5 //0.5
                                       0 //0.1
     ArrayList<A> as;
                                       0//0.1
     Bb;
                                       0.1//0.1
     ArrayList<B> bs;
                                       0//0.1
     C cs[] = new C[3];
                                       0//0.1
     D ds[] = new D[4];
                                       0//0.1
     Dd;
                                       0.1//0.1
     Ee;
                                       0.1//0.1
     E[] ess = new E[5];
                                       0//0.1
     ArrayList<E> es;
                                       0//0.1
     Ff;
                                       0//0.1
     ArrayList<F> fs;
                                       0//0.1
     ArrayList<G> gs;
                                       0 //0.1
     Gg;
                                       0//0.1
     Jj;
                                       0 //0.1
```

### Total: 8.6

# ALEX DARIO CUZCO YAMASCA INSPECTOR:CRIOLLO SEBASTIAN

```
public class A {
                                       0.5//0.5
  private ArrayList<A> as;
                                       0//0.4
  //constructors
                                       0//0.1
                                       0//0.1
  //getters,setters
public class B extends A{
                                       1//1
  private ArrayList<G> gs;
                                       0//0.9
 //constructors
                                       0//0.1
  //getters,setters
                                       0.1//0.1
public class C extends A{
                                       1 //1
```

```
private ArrayList<E> es;
                                      0//0.9
  private E ess[];
                                      0//0.3
 //constructors
                                      0//0.1
  //getters,setters
                                      0.1//0.1
public class D extends A {
                                       1//1
  private E es[] = new E[5];
                                      0//0.9
  private ArrayList<F> fs;
                                      0//0.9
  //constructors
                                      0//0.1
  //getters,setters
                                      0.1//0.1
public class E {
                                      1//1
                                      //-1
  //extra attribut
  //constructors
                                      0 //0.1
public class F {
                                       1//1
  //extra attribut
                                      //-1
  //constructors
                                      0//0.1
public class G implements H{
                                      0//1
  public void f(J j){
                                       1 //1
  public J f(){
                                       0 //1
     return new J();
public interface H {
                                        0//1
  public void m(J j);
                                      0 //1
public class J {
                                       1 //1
  public static void main(String[] args) {0.5 //0.5
     Aa;
                                      0 //0.1
     ArrayList<A> as;
                                      0//0.1
     Bb;
                                      0.1//0.1
     ArrayList<B> bs;
                                      0//0.1
     C cs[] = new C[3];
                                      0//0.1
     D ds[] = new D[4];
                                      0//0.1
     Dd;
                                      0.1//0.1
     Ee;
                                      0.1//0.1
     E[] ess = new E[5];
                                      0//0.1
     ArrayList<E> es;
                                      0//0.1
     Ff;
                                      0//0.1
     ArrayList<F> fs;
                                      0//0.1
     ArrayList<G> gs;
                                      0 //0.1
                                      0//0.1
     Gg;
     Jj;
                                      0 //0.1
Total: 9.1
       STEFANY MARICELA DIAZ ANTUN
       Inspector: Alex Cuzco
Rubric:
```

public class A {

private ArrayList<A> as;

// 0.5/0.5

// 0.4/0.4

//constructors //getters,setters public class B extends A{   private ArrayList <g> gs; //constructors //getters,setters</g>	// 0.1/0.1 // 0.1/0.1 // 1/1 // 0.9/0.9 // 0.1/0.1 // 0.1/0.1	Total class A: 1.1  Total class B: 2.1
public class C extends A{     private ArrayList <e> es;     private E ess[];     //constructors     //getters,setters</e>	// 1/1 // 0.9/0.9 // 0/0.3 // 0.1/0.1 // 0.1/0.1	Total class C: 2.1
<pre>public class D extends A {   private E es[] = new E[5];   private ArrayList<f> fs;   //constructors</f></pre>	// 1/1 // 0.5/0.9 // 0.9/0.9 // 0.1/0.1	T. I. I. D. O.
//getters,setters public class E { //constructors	// 0.1/0.1 // 1/1 // 0/0.1	Total class D: 2.6  Total class E: 1
public class F { //constructors public class G implements H{ public void f(J j){	// 1/1 // 0/0.1 // 1/1 // 0/1	Total class F: 1
public J f(){ return new J();	// 0/1	
} public interface H {	// 1/1	Total class G: 1
public void m(J j); public class J {	// 0/1 // 1/1	Total class H: 1 Total class J: 1
<pre>public static void main(String[] arg A a;</pre>	J-7 C	0.5/0.5 0.1/0.1
ArrayList <a> as;</a>		0.1/0.1
B b;		0.1/0.1
ArrayList <b> bs;</b>		0.1/0.1 0.1/0.1
C cs[] = new C[3]; D ds[] = new D[4];		0.1/0.1
D d;		0.1/0.1
E e;		0.1/0.1
E[] ess = new E[5];		0.1/0.1
ArrayList <e> es; F f;</e>		0/0.1 0/0.1
ArrayList <f> fs;</f>		0/0.1
ArrayList <g> gs;</g>		0/0.1
G g;	// (	0/0.1
J j;	// (	0/0.1 <b>Total main: 1.4</b>

Total : 14.3

# MATEO JAREN GARCIA GALARZA

**Inspector**: Stefany Díaz

inspector. Stelany Diaz	
Rubric:	
public class A {	//0.5/0.5
private ArrayList <a> as;</a>	//0.4/0.4
//constructors	//0.1/01
//getters,setters	//0.1/0.1
public class B extends A{	//1/1
private ArrayList <g> gs;</g>	//0.0/0.9
//constructors	//0.1/0.1
//getters,setters	//0.1/0.1
public class C extends A{	//1/1
private ArrayList <e> es;</e>	//0.0/0.9
private E ess[];	//0.3/0.3
//constructors	//0.1/0.1
//getters,setters	//0.1/0.1
public class D extends A {	//1/1
private E es[] = new E[5];	//0.9/0.9
private ArrayList <f> fs;</f>	//0.9/0.9
//constructors	//0.1/0.1
//getters,setters	//0.1/0.1
public class E {	//1/1
//extra attribut	//-1
//constructors	//0.1/0.1
public class F {	//1/1
//extra attribut	//-1
//constructors	//0.1/0.1
public class G implements H{	//1/1
public void f(J j){	//1/1
}	
public J f(){	//0/1
return new J();	
}	
public interface H {	//1/1
public void m(J j);	//0/1
public class J {	//1/1
public static void main(String[]	args) { //0.5/0.5
A a;	//0.1/0.1
ArrayList <a> as;</a>	//0.0/0.1
B b;	//0.1/0.1
ArrayList <b> bs;</b>	//0.0/0.1
C cs[] = new C[3];	//0.0/0.1
D ds[] = new D[4];	//0.0/0.1
D d;	//0.1/0.1
E e;	//0.1/0.1
E[] ess = new E[5];	//0.0/0.1
ArrayList <e> es;</e>	//0.0/0.1
AllayList\E/ 65,	770.070.1

```
F f; //0.1/0.1
ArrayList<F> fs; //0.0/0.1
ArrayList<G> gs; //0.0/0.1
G g; //0.1/0.1
J j; //0.1/0.1
```

**Total**: 14.2

### EDUARDO DAVID GARCIA ROMERO

Inspector: Mateo García

```
Rubric:
public class A {
                                       0.5//0.5
  private ArrayList<A> as;
                                       0.4//0.4
  //constructors
                                       0.1//0.1
  //getters,setters
                                       0.1//0.1
public class B extends A{
                                       1//1
  private ArrayList<G> gs;
                                       0//0.9
 //constructors
                                       0.1//0.1
  //getters,setters
                                       0//0.1
public class C extends A{
                                        1//1
  private ArrayList<E> es;
                                       0.9//0.9
  private E ess[];
                                       0//0.3
 //constructors
                                       0.1//0.1
  //getters,setters
                                       0.1//0.1
public class D extends A {
                                       1//1
  private E es[] = new E[5];
                                       0//0.9
  private ArrayList<F> fs;
                                       0.9//0.9
  //constructors
                                       0.1//0.1
  //getters,setters
                                       0.1//0.1
public class E {
                                       1//1
  //extra attribut
                                       //-1
  //constructors
                                       0.1//0.1
public class F {
                                       1//1
  //extra attribut
                                       //-1
  //constructors
                                       0.1//0.1
public class G implements H{
                                       1//1
  public void f(J j){
                                        0//1
                                       0//1
  public J f(){
     return new J();
public interface H {
                                        0//1
  public void m(J j);
                                        0//1
                                        0//1
public class J {
  public static void main(String[] args) {0.5//0.5
                                        0.1//0.1
                                       0//0.1
     ArrayList<A> as;
     Bb;
                                       0//0.1
```

```
ArrayList<B> bs;
                                0//0.1
C cs[] = new C[3];
                                0//0.1
D ds[] = new D[4];
                                0//0.1
Dd;
                                0//0.1
Ee;
                                0//0.1
E[] ess = new E[5];
                                0//0.1
ArrayList<E> es;
                                0//0.1
Ff;
                                0//0.1
ArrayList<F> fs;
                                0//0.1
ArrayList<G> gs;
                                0 //0.1
Gg;
                                0//0.1
Јj;
                                0//0.1
```

### **Total:** 13..5

# JUAN CARLOS GRANDA ARCOS

### Inspector: Eduardo García

inspector . Eduardo Garcia	l
public class A {	0.5//0.5
private ArrayList <a> as;</a>	004//0.4
//constructors	0.1//0.1
//getters,setters	0.1//0.1
public class B extends A{	1//1
private ArrayList <g> gs;</g>	0//0.9
//constructors	0.1//0.1
//getters,setters	0.1//0.1
public class C extends A{	1 //1
private ArrayList <e> es;</e>	0.9//0.9
private E ess[];	0//0.3
//constructors	0.1//0.1
//getters,setters	0.1//0.1
public class D extends A {	1//1
private E es[] = new E[5];	0.9//0.9
private ArrayList <f> fs;</f>	0.9//0.9
//constructors	0.1//0.1
//getters,setters	0.1//0.1
public class E {	1//1
//extra attribut	//-1
//constructors	0 .1//0.1
public class F {	1//1
//extra attribut	//-1
//constructors	0.1//0.1
public class G implements H{	0.1//1
public void f(J j){	1 //1
}	
public J f(){	1//1
return new J();	
}	
public interface H {	1//1
public void m(J j);	0 //1

1 //1
s) {0.5 //0.5
0.1 //0.1
0.1//0.1
0.1//0.1
0//0.1
0//0.1
0.1//0.1
0.1//0.1
0.1//0.1
0//0.1
0.1//0.1
0.1//0.1
0.1//0.1
0 //0.1
0//0.1
0 //0.1

Total: 13.8

## JOSUE DANIEL GUAYASAMÍN HEREDIA

# Inspector : Juan Granda public class A {

0.5//0.5 private ArrayList<A> as; 004//0.4 //constructors 0.1//0.1 //getters,setters 0.1//0.1 1//1 public class B extends A{ 0//0.9 private ArrayList<G> gs; //constructors 0.1//0.1 //getters,setters 0.1//0.1 public class C extends A{ 1 //1 private ArrayList<E> es; 0.9//0.9 private E ess[]; 0//0.3 //constructors 0.1//0.1 //getters,setters 0.1//0.1 public class D extends A { 1//1 private E es[] = new E[5]; 0.9//0.9 private ArrayList<F> fs; 0.9//0.9 //constructors 0.1//0.1 //getters,setters 0.1//0.1 public class E { 1//1 //extra attribut //-1 //constructors 0 .1//0.1 public class F { 1//1 //extra attribut //-1 //constructors 0.1//0.1 public class G implements H{ 0.1//1 public void f(J j){ 1 //1

```
}
                                        1//1
  public J f(){
     return new J();
public interface H {
                                         1//1
  public void m(J j);
                                       0 //1
public class J {
                                       1 //1
  public static void main(String[] args) {0.5 //0.5
                                       0.1 //0.1
     ArrayList<A> as;
                                       0.1//0.1
     B b;
                                       0.1//0.1
     ArrayList<B> bs;
                                       0//0.1
     C cs[] = new C[3];
                                       0//0.1
     D ds[] = new D[4];
                                       0.1//0.1
                                       0.1//0.1
     Dd;
     Ee;
                                       0.1//0.1
     E[] ess = new E[5];
                                       0//0.1
     ArrayList<E> es;
                                       0.1//0.1
     F f;
                                       0.1//0.1
     ArrayList<F> fs;
                                       0.1//0.1
    ArrayList<G> gs;
                                       0 //0.1
     Gg;
                                       0//0.1
     Jj;
                                       0 //0.1
```

Total: 13.8

# CARLOS ORLANDO HERNANDEZ ALMEIDA Inspector: Josué Guayasamín.

```
0.5//0.5
public class A {
  private ArrayList<A> as;
                                       0.4//0.4
  //constructors
                                       0//0.1
  //getters,setters
                                       0//0.1
public class B extends A{
                                       1//1
  private ArrayList<G> gs;
                                       0.9//0.9
 //constructors
                                       0//0.1
  //getters,setters
                                       0//0.1
public class C extends A{
                                       1 //1
                                       0.9//0.9
  private ArrayList<E> es;
  private E ess[];
                                       0.3//0.3
                                       0//0.1
 //constructors
  //getters,setters
                                       0//0.1
                                       1//1
public class D extends A {
  private E es[] = new E[5];
                                       0.9//0.9
  private ArrayList<F> fs;
                                       0.9//0.9
  //constructors
                                       0//0.1
                                       0//0.1
  //getters,setters
                                       1//1
public class E {
```

```
0//-1
  //extra attribut
                                      0 //0.1
  //constructors
public class F {
                                       1//1
  //extra attribut
                                      0//-1
  //constructors
                                      0//0.1
public class G implements H{
                                       1//1
                                      0 //1
  public void f(J j){
                                        0//1
  public J f(){
     return new J();
public interface H {
                                       1 //1
                                      0 //1
  public void m(J j);
public class J {
                                        1//1
  public static void main(String[] args) { 0//0.5
                                       0 //0.1
     Aa;
     ArrayList<A> as;
                                      0//0.1
     B b;
                                      0//0.1
     ArrayList<B> bs;
                                      0//0.1
     C cs[] = new C[3];
                                      0//0.1
     D ds[] = new D[4];
                                      0//0.1
     Dd;
                                      0//0.1
     Ee;
                                      0//0.1
     E[] ess = new E[5];
                                      0//0.1
     ArrayList<E> es;
                                      0//0.1
     Ff;
                                      0//0.1
     ArrayList<F> fs;
                                      0//0.1
     ArrayList<G> gs;
                                      0 //0.1
     Gg;
                                      0//0.1
                                      0 //0.1
     Jj;
   TOTAL: 12.8
       JUAN MATEO IZA BARRIONUEVO
       Inspector: Carlos Hernandez
       TOTAL: 14.2
                                      0.5//0.5
public class A {
  private ArrayList<A> as;
                                      0.4//0.0
  //constructors
                                      0.1//0.0
  //getters.setters
                                      0.1//0.0
public class B extends A{
                                       1//1
  private ArrayList<G> gs;
                                      0.9//0.0
 //constructors
                                      0.1//0.0
                                      0.1//0.0
  //getters,setters
public class C extends A{
                                       1//1
  private ArrayList<E> es;
                                      0.9//0.9
  private E ess[];
                                      0.3//0.0
 //constructors
                                      0.1//0.0
```

//getters,setters

0.1//0.0

```
public class D extends A {
                                       1//1
  private E es[] = new E[5];
                                       0.9//0.5
  private ArrayList<F> fs;
                                       0.9//0.9
  //constructors
                                       0.1//0.0
  //getters,setters
                                       0.1//0.0
public class E {
                                       1//1
  //extra attribut
                                       -1//0.0
  //constructors
                                        0.1//0.0
public class F {
                                       1//1
  //extra attribut
                                       -1//0.0
  //constructors
                                       0//0.0
public class G implements H{
                                       1//1
                                       1 //0
  public void f(J j){
  }
  public J f(){
                                         1//0
     return new J();
public interface H {
                                         1//1
  public void m(J j);
                                         1//0
public class J {
                                         1//0
  public static void main(String[] args) { 0.5//0.5
```

# DAVID ALEJANDRO LOPEZ VILLACIS

Inspector JUAN MATEO IZA BARRIONUEVO

**TOTAL: 12.7** 

public class A {	0.5//0.5
private ArrayList <a> as;</a>	0.4//0.4
//constructors	0.1//0.1
//getters,setters	0.1//0.1
public class B extends A{	1//1
private ArrayList <g> gs;</g>	0//0.9
//constructors	0.1//0.1
//getters,setters	0.1//0.1
public class C extends A{	1 //1
private ArrayList <e> es;</e>	0//0.9
private E ess[];	0//0.3
//constructors	0.1//0.1
//getters,setters	0.1//0.1
public class D extends A {	1//1
private E es[] = new E[5];	0.9//0.9
private ArrayList <f> fs;</f>	0//0.9
//constructors	0.1//0.1
//getters,setters	0.1//0.1
public class E {	1//1
//extra attribut	0//-1
//constructors	0.1 //0.1

```
public class F {
                                       1//1
                                       0//-1
  //extra attribut
                                       0.1//0.1
  //constructors
public class G implements H{
                                       1//1
                                       1 //1
  public void f(J j){
                                       1 //1
  public J f(){
     return new J();
                                       1 //1
public interface H {
  public void m(J j);
                                       0 //1
public class J {
                                       1//1
  public static void main(String[] args) { 0.5//0.5
     Aa;
                                        0.1//0.1
     ArrayList<A> as;
                                       0//0.1
     Bb;
                                       0//0.1
     ArrayList<B> bs;
                                       0//0.1
     C cs[] = new C[3];
                                       0//0.1
     D ds[] = new D[4];
                                       0//0.1
     Dd;
                                       0//0.1
     Ee;
                                       0//0.1
     E[] ess = new E[5];
                                       0//0.1
     ArrayList<E> es;
                                       0//0.1
     Ff;
                                       0//0.1
     ArrayList<F> fs;
                                       0//0.1
     ArrayList<G> gs;
                                       0 //0.1
                                       0//0.1
     Gg;
     Jj;
                                       0 //0.1
       CARLOS ISAAC ÑATO CAIZA
       Inspector: David Alejandro Lopez Villacis
       TOTAL:
public class A {
                                      0.5//0.5
  private ArrayList<A> as;
                                       0.4//0.4
  //constructors
                                       0//0.1
  //getters.setters
                                       0//0.1
public class B extends A{
                                       1//1
  private ArrayList<G> gs;
                                       0.9//0.9
 //constructors
                                       0.1//0.1
  //getters,setters
                                       0.1//0.1
public class C extends A{
                                       1//1
  private ArrayList<E> es;
                                       0.9//0.9
                                       0//0.3
  private E ess[];
 //constructors
                                       0//0.1
  //getters,setters
                                       0//0.1
public class D extends A {
                                       1//1
  private E es[] = new E[5];
                                       0.9//0.9
  private ArrayList<F> fs;
                                       0//0.9
```

```
//constructors
                                       0//0.1
                                       0//0.1
  //getters,setters
public class E {
                                       1//1
  //extra attribut
                                       0//-1
  //constructors
                                       0//0.1
public class F {
                                       1//1
  //extra attribut
                                       0//-1
  //constructors
                                       0.1//0.1
public class G implements H{
                                       0//1
  public void f(J j){
                                        1//1
                                        1//1
  public J f(){
     return new J();
public interface H {
                                        0//1
  public void m(J j);
                                        0//1
public class J {
                                        1//1
  public static void main(String[] args) { 0.5//0.5
     Aa;
                                        0//0.1
     ArrayList<A> as;
                                       0.1//0.1
     Bb;
                                       0.1//0.1
     ArrayList<B> bs;
                                       0.1//0.1
     C cs[] = new C[3];
                                       0.1//0.1
     D ds[] = new D[4];
                                       0.1//0.1
     Dd;
                                       0//0.1
     Ee;
                                       0//0.1
     E[] ess = new E[5];
                                       0.1//0.1
     ArrayList<E> es;
                                       0.1//0.1
     Ff;
                                       0.1//0.1
     ArrayList<F> fs;
                                       0.1//0.1
     ArrayList<G> gs;
                                       0.1//0.1
                                       0.1//0.1
     G g;
     Jj;
                                       0.1//0.1
```

### FLAVIO OLIVIER PASPUEL CASTILLO

Total 13.1/15

Inspector: Carlos Ñato

public class A {	0.5//0.5
private ArrayList <a> as;</a>	0//0.4
//constructors	0//0.1
//getters,setters	0//0.1
public class B extends A{	1//1
private ArrayList <g> gs;</g>	0//0.9
//constructors	0//0.1
//getters,setters	0//0.1

```
public class C extends A{
                                       1//1
  private ArrayList<E> es;
                                      0.9//0.9
                                      0.3//0.3
  private E ess[];
 //constructors
                                      0//0.1
                                      0//0.1
  //getters,setters
public class D extends A {
                                       1//1
  private E es[] = new E[5];
                                      0.9//0.9
  private ArrayList<F> fs;
                                      0.9//0.9
  //constructors
                                      0//0.1
  //getters,setters
                                      0//0.1
public class E {
                                       1//1
  //extra attribut
                                      0//-1
  //constructors
                                       0//0.1
public class F {
                                       1//1
  //extra attribut
                                       0//-1
                                      0//0.1
  //constructors
public class G implements H{
                                       1//1
  public void f(J j){
                                       1//1
  }
                                       0 //1
  public J f(){
     return new J();
public interface H {
                                       1 //1
  public void m(J j);
                                       0 //1
public class J {
                                       1 //1
  public static void main(String[] args) {0.5 //0.5
                                       0.1 //0.1
     ArrayList<A> as;
                                       0//0.1
     Bb;
                                      0//0.1
     ArrayList<B> bs;
                                      0//0.1
     C cs[] = new C[3];
                                      0//0.1
     D ds[] = new D[4];
                                      0//0.1
     Dd;
                                      0//0.1
     Ee;
                                      0//0.1
     E[] ess = new E[5];
                                      0//0.1
     ArrayList<E> es;
                                      0//0.1
     Ff;
                                      0//0.1
     ArrayList<F> fs;
                                      0//0.1
     ArrayList<G> gs;
                                       0//0.1
     Gg;
                                       0//0.1
     Jj;
                                       0//0.1
       ANTONIO ADRIÁN REVILLA ANCHAPAXI
       Total 15/15
       Inspector: Olivier Paspuel
Rubric:
                                      0.5//0.5
public class A {
  private ArrayList<A> as;
                                      0.4//0.4
```

```
//constructors
                                       0.1//0.1
  //getters,setters
                                       0//0.1
public class B extends A{
                                       1//1
  private ArrayList<G> gs;
                                       0//0.9
 //constructors
                                       0.1//0.1
  //getters.setters
                                       0//0.1
public class C extends A{
                                        1//1
  private ArrayList<E> es;
                                       0.9//0.9
  private E ess[];
                                       0//0.3
 //constructors
                                       0.1//0.1
  //getters,setters
                                       0//0.1
public class D extends A {
                                       1//1
  private E es[] = new E[5];
                                       0.9//0.9
                                       0.9//0.9
  private ArrayList<F> fs;
  //constructors
                                       0.1//0.1
  //getters.setters
                                       0//0.1
public class E {
                                       1//1
                                       //-1
  //extra attribut
  //constructors
                                       0.1 //0.1
public class F {
                                       1//1
  //extra attribut
                                       0//-1
                                       0.1//0.1
  //constructors
public class G implements H{
                                       1//1
  public void f(J j){
                                        1//1
  }
                                        0 //1
  public J f(){
     return new J();
public interface H {
                                         1//1
  public void m(J j);
                                       1 //1
                                         1//1
public class J {
  public static void main(String[] args) { 0.5//0.5
     Aa:
                                        0.1 //0.1
     ArrayList<A> as;
                                       0.1//0.1
     Bb;
                                       0//0.1
     ArrayList<B> bs;
                                       0//0.1
     C cs[] = new C[3];
                                       0.1//0.1
     D ds[] = new D[4];
                                       0.1//0.1
     Dd;
                                       0.1//0.1
     E e:
                                       0//0.1
                                       0.1//0.1
     E[] ess = new E[5];
     ArrayList<E> es;
                                       0.1//0.1
     Ff;
                                       0.1//0.1
     ArrayList<F> fs;
                                       0//0.1
     ArrayList<G> gs;
                                        0//0.1
     Gg;
                                       0.1//0.1
     Jj;
                                        0.1//0.1
```

### ILHAN RANDY ROGEL VILLA

### Inspector: Antonio Revilla

```
Total: 10.3 pts.
public class A {
                                       0.5//0.5
  private ArrayList<A> as;
                                       0.2//0.4
  //constructors
                                       0//0.1
  //getters,setters
                                       0.1//0.1
public class B extends A{
                                       1//1
  private ArrayList<G> gs;
                                       0//0.9
 //constructors
                                       0//0.1
  //getters,setters
                                       0.1//0.1
public class C extends A{
                                       1 //1
  private ArrayList<E> es;
                                       0//0.9
  private E ess[];
                                       0.3//0.3
 //constructors
                                       0//0.1
  //getters,setters
                                       0.1//0.1
public class D extends A {
                                       1//1
  private E es[] = new E[5];
                                       0.9//0.9
  private ArrayList<F> fs;
                                       0.5//0.9
  //constructors
                                       0//0.1
  //getters,setters
                                       0.1//0.1
public class E {
                                       1//1
  //extra attribut
                                       -1//-1
  //constructors
                                       0.1 //0.1
public class F {
                                       1//1
  //extra attribut
                                       0//-1
  //constructors
                                       0//0.1
public class G implements H{
                                       1//1
                                        1//1
  public void f(J j){
  }
  public J f(){
                                         0//1
     return new J();
public interface H {
                                         1//1
  public void m(J j);
                                         0//1
public class J {
                                         0//1
  public static void main(String[] args) { 0.5 //0.5
                                        0 //0.1
     ArrayList<A> as;
                                       0//0.1
                                       0//0.1
     Bb;
     ArrayList<B> bs;
                                       0//0.1
     C cs[] = new C[3];
                                       0//0.1
     D ds[] = new D[4];
                                       0//0.1
     Dd;
                                       0//0.1
     Ee;
                                       0//0.1
     E[] ess = new E[5];
                                       0//0.1
     ArrayList<E> es;
                                       0//0.1
```

```
F f; 0//0.1
ArrayList<F> fs; 0//0.1
ArrayList<G> gs; 0//0.1
G g; 0//0.1
J j; 0//0.1
```

#### MATEO NICOLAY ROGERON MAILA

### Inspector: Antonio Revilla

# Total: 10 pts.

```
public class A {
                                       0.5//0.5
  private ArrayList<A> as;
                                       0.4//0.4
  //constructors
                                       0.1//0.1
  //getters,setters
                                       0//0.1
public class B extends A{
                                        1//1
  private ArrayList<G> gs;
                                       0.9//0.9
                                       0.1//0.1
 //constructors
  //getters,setters
                                       0//0.1
public class C extends A{
                                        1 //1
  private ArrayList<E> es;
                                       0.9//0.9
  private E ess[];
                                       0//0.3
                                       0.1//0.1
 //constructors
  //getters,setters
                                       0//0.1
public class D extends A {
                                        1//1
  private E es[] = new E[5];
                                       0//0.9
  private ArrayList<F> fs;
                                       0.5//0.9
  //constructors
                                       0//0.1
  //getters,setters
                                       0//0.1
public class E {
                                        1//1
  //extra attribut
                                       0//-1
  //constructors
                                       0 //0.1
public class F {
                                        1//1
                                       0//-1
  //extra attribut
  //constructors
                                       0//0.1
public class G implements H{
                                        0//1
  public void f(J j){
                                        0//1
  }
                                         0//1
  public J f(){
     return new J();
public interface H {
                                         1//1
  public void m(J j);
                                         0//1
                                         0//1
public class J {
  public static void main(String[] args) { 0.5 //0.5
                                        0 //0.1
                                        0//0.1
     ArrayList<A> as;
     Bb;
                                       0//0.1
     ArrayList<B> bs;
                                       0//0.1
     C cs[] = new C[3];
                                       0//0.1
```

```
Dd;
                                      0//0.1
     Ee;
                                      0//0.1
     E[] ess = new E[5];
                                      0//0.1
     ArrayList<E> es;
                                      0//0.1
     Ff;
                                       0//0.1
     ArrayList<F> fs;
                                      0//0.1
     ArrayList<G> gs;
                                       0//0.1
     Gg;
                                      0//0.1
                                       0//0.1
     Jj;
       ANDRÉS ALEJANDRO ROMERO ZAMBRANO
Inspector: Mateo Rogeron
Total: 16.6
Rubric:
                                      0.5//0.5
public class A {
  private ArrayList<A> as;
                                       0//0.4
  //constructors
                                      0.1//0.1
  //getters,setters
                                      0.1//0.1
                                       1//1
public class B extends A{
  private ArrayList<G> gs;
                                      0.9//0.9
 //constructors
                                      0.1//0.1
  //getters,setters
                                      0.1//0.1
public class C extends A{
                                       1//1
  private ArrayList<E> es;
                                      0.9//0.9
  private E ess[];
                                      0.3//0.3
 //constructors
                                      0.1//0.1
  //getters,setters
                                      0.1//0.1
public class D extends A {
                                       1//1
  private E es[] = new E[5];
                                      0.9//0.9
  private ArrayList<F> fs;
                                      0.9//0.9
  //constructors
                                      0.1//0.1
  //getters,setters
                                      0.1//0.1
public class E {
                                       1//1
  //extra attribut
                                       0//-1
  //constructors
                                       0.1//0.1
public class F {
                                       1//1
  //extra attribut
                                       0//-1
  //constructors
                                       0.1//0.1
public class G implements H{
                                       1//1
  public void f(J j){
                                       1//1
  }
  public J f(){
                                        0.5//1
     return new J();
public interface H {
                                       1 //1
  public void m(J j);
                                      0 //1
public class J {
                                        1//1
  public static void main(String[] args) { 0.5//0.5
```

D ds[] = new D[4];

0//0.1

A a;	0.1 //0.1
ArrayList <a> as;</a>	0.1//0.1
B b;	0.1//0.1
ArrayList <b> bs;</b>	0.1//0.1
C cs[] = new C[3];	0.1//0.1
D ds[] = new D[4];	0.1//0.1
D d;	0.1//0.1
Ee;	0//0.1
E[] ess = new E[5];	0.1//0.1
ArrayList <e> es;</e>	0.1//0.1
F f;	0.1//0.1
ArrayList <f> fs;</f>	0.1//0.1
ArrayList <g> gs;</g>	0.1//0.1
G g;	0//0.1
J j;	0//0.1

#### **LUIS EDUARDO SAGNAY PILAMUNGA**

**Inspector: Andrés Romero** 

**TOTAL: 13.9** 

```
0.5//0.5
public class A {
  private ArrayList<A> as;
                                       0.4//0.4
  //constructors
                                       0.1//0.1
  //getters,setters
                                       0.1//0.1
public class B extends A{
                                       1//1
  private ArrayList<G> gs;
                                       0//0.9
 //constructors
                                       0.1//0.1
                                       0.1//0.1
  //getters,setters
public class C extends A{
                                        1//1
                                       0//0.9
  private ArrayList<E> es;
                                       0.3//0.3
  private E ess[];
                                       0.1//0.1
 //constructors
  //getters,setters
                                       0.1//0.1
public class D extends A {
                                       1//1
  private E es[] = new E[5];
                                       0.9//0.9
                                       0.9//0.9
  private ArrayList<F> fs;
                                       0.1//0.1
  //constructors
                                       0.1//0.1
  //getters,setters
public class E {
                                       1//1
  //extra attribut
                                       0//-1
  //constructors
                                        0.1//0.1
public class F {
                                       1//1
                                       0//-1
  //extra attribut
                                       0.1//0.1
  //constructors
public class G implements H{
                                       1//1
  public void f(J j){
                                        1//1
  }
  public J f(){
                                        1 //1
```

```
return new J();
  }
public interface H {
                                        1//1
                                       1 //1
  public void m(J j);
public class J {
                                        1//1
  public static void main(String[] args) { 0.5//0.5
                                        0.1//0.1
     ArrayList<A> as;
                                      0.1//0.1
     Bb;
                                      0.1//0.1
     ArrayList<B> bs;
                                      0.1//0.1
     C cs[] = new C[3];
                                      0//0.1
     D ds[] = new D[4];
                                      0//0.1
     Dd;
                                      0.1//0.1
     Ee;
                                      0.1//0.1
     E[] ess = new E[5];
                                      0//0.1
     ArrayList<E> es;
                                      0.1//0.1
     Ff;
                                      0.1//0.1
     ArrayList<F> fs;
                                      0//0.1
     ArrayList<G> gs;
                                       0//0.1
     Gg;
                                       0.1//0.1
     Jj;
                                       0.1//0.1
```

### FREDERICK SANTIAGO TIPÁN MORENO

# Inspector : Luis Sagnay

Rubric:

public class A { 0.5//0.5 private ArrayList<A> as; 0.4//0.4 //constructors 0//0.1 //getters,setters 0//0.1 public class B extends A{ 1//1 private ArrayList<G> gs; //0.9 //constructors //0.1 //getters,setters //0.1 public class C extends A{ 1//1 0//0.9 private ArrayList<E> es; private E ess[]; 0.3//0.3 //constructors //0.1 //getters,setters //0.1 public class D extends A { 1//1 private E es[] = new E[5]; 0.9//0.9 private ArrayList<F> fs; 0.9//0.9 //0.1 //constructors //getters,setters //0.1 public class E { 1//1 //extra attribut //-1 //0.1 //constructors public class F { 1//1

```
//-1
  //extra attribut
                                      //0.1
  //constructors
public class G implements H{
                                      1//1
  public void f(J j){
                                       //1
                                        1//1
  public J f(){
     return new J();
                                       1 //1
public interface H {
  public void m(J j);
                                       //1
public class J {
                                       //1
  public static void main(String[] args) { 0.5//0.5
     Aa;
                                       //0.1
     ArrayList<A> as;
                                      0.1//0.1
     Bb;
                                      //0.1
     ArrayList<B> bs;
                                      //0.1
     C cs[] = new C[3];
                                      //0.1
     D ds[] = new D[4];
                                      //0.1
     Dd;
                                      //0.1
     Ee;
                                      //0.1
     E[] ess = new E[5];
                                      //0.1
     ArrayList<E> es;
                                      //0.1
     Ff;
                                      //0.1
     ArrayList<F> fs;
                                      //0.1
     ArrayList<G> gs;
                                       //0.1
     Gg;
                                      //0.1
     Jj;
                                       //0.1
       GABRIEL NICOLAS VIVANCO RAZA
Inspector: Fréderick Tipán
       TOTAL: 13.4
public class A {
                                      0.5//0.5
  private ArrayList<A> as;
                                      0//0.4
  //constructors
                                      0//0.1
  //getters,setters
                                      0.1//0.1
public class B extends A{
                                      1//1
  private ArrayList<G> gs;
                                      0//0.9
 //constructors
                                      0.1//0.1
  //getters,setters
                                      0.1//0.1
public class C extends A{
                                      1 //1
  private ArrayList<E> es;
                                      0.9//0.9
  private E ess[];
                                      0//0.3
 //constructors
                                      0.1//0.1
  //getters,setters
                                      0.1//0.1
public class D extends A {
                                      1//1
  private E es[] = new E[5];
                                      0.9//0.9
  private ArrayList<F> fs;
                                      0.9//0.9
```

//constructors

0.1//0.1

```
//getters,setters
                                      0.1//0.1
public class E {
                                       1//1
  //extra attribut
                                      //-1
  //constructors
                                       0//0.1
public class F {
                                       1//1
  //extra attribut
                                      //-1
  //constructors
                                      0//0.1
public class G implements H{
                                       1//1
                                       1//1
  public void f(J j){
  }
                                        0//1
  public J f(){
     return new J();
public interface H {
                                        1//1
  public void m(J j);
                                       1//1
public class J {
                                        0//1
  public static void main(String[] args) { 0.5//0.5
                                        0//0.1
     ArrayList<A> as;
                                      0//0.1
     Bb;
                                      0//0.1
     ArrayList<B> bs;
                                      0//0.1
     C cs[] = new C[3];
                                      0//0.1
     D ds[] = new D[4];
                                      0//0.1
     Dd;
                                      0//0.1
     Ee;
                                      0//0.1
     E[] ess = new E[5];
                                      0//0.1
     ArrayList<E> es;
                                      0//0.1
     Ff;
                                       0//0.1
     ArrayList<F> fs;
                                      0//0.1
     ArrayList<G> gs;
                                       0//0.1
     Gg;
                                       0//0.1
     Jj;
                                       0//0.1
       JEFFERSON DAVID YEPEZ MORAN
       inspector: Gabriel Vivanco
       TOTAL:14.1
public class A {
                                      0.5//0.5
  private ArrayList<A> as;
                                      0.4//0.4
  //constructors
                                      0.1//0.1
  //getters,setters
                                      0.1//0.1
public class B extends A{
                                       1//1
  private ArrayList<G> gs;
                                      0.9//0.9
 //constructors
                                      0.1//0.1
  //getters,setters
                                      0.1//0.1
public class C extends A{
                                       1//1
  private ArrayList<E> es;
                                      0//0.9
  private E ess[];
                                      0.3//0.3
```

0.1//0.1

//constructors

```
//getters,setters
                                       0.1//0.1
public class D extends A {
                                       1//1
  private E es[] = new E[5];
                                       0.9//0.9
  private ArrayList<F> fs;
                                       0.9//0.9
  //constructors
                                       0.1//0.1
  //getters.setters
                                       0.1//0.1
public class E {
                                       1//1
  //extra attribut
                                       -1//-1
  //constructors
                                       0.1//0.1
public class F {
                                       1//1
  //extra attribut
                                       0//-1
                                       0//0.1
  //constructors
public class G implements H{
                                       1//1
  public void f(J j){
                                       1 //1
  }
  public J f(){
                                        0//1
     return new J();
                                        1//1
public interface H {
  public void m(J j);
                                        0//1
public class J {
                                        1 //1
  public static void main(String[] args) { 0.5//0.5
     Aa;
                                        0.1//0.1
     ArrayList<A> as;
                                       0//0.1
     Bb;
                                       0.1//0.1
     ArrayList<B> bs;
                                       0//0.1
     C cs[] = new C[3];
                                       0//0.1
     D ds[] = new D[4];
                                       0//0.1
     Dd;
                                       0.1//0.1
     Ee;
                                       0.1//0.1
     E[] ess = new E[5];
                                       0//0.1
     ArrayList<E> es;
                                       0//0.1
     Ff;
                                       0.1//0.1
     ArrayList<F> fs;
                                       0//0.1
     ArrayList<G> gs;
                                       0//0.1
                                       0.1//0.1
     Gg;
     Jj;
                                       0.1 //0.1
```