

19seit_L01_exercise_code

```

-----
package seit_1;

public class Main1
{
    public static void main(String[] args)
    {
        Person w1 = new Person("aaa", 1, 2, 1991); w1.type = 2;
        Person w2 = new Person("bbb", 3, 4, 1993); w2.type = 2;
        Person w3 = new Person("ccc", 5, 6, 1995); w3.type = 2;

        Person b1 = new Person("ddd", 7, 8, 1997); b1.type = 1;
        b1.worker = new Person[10];
        Person b2 = new Person("eee", 9, 10, 1999); b2.type = 1;
        b2.worker = new Person[10];

        w1.boss = b1; b1.worker[b1.nworkers++] = w1;
        w2.boss = b1; b1.worker[b1.nworkers++] = w2;
        w3.boss = b1; b1.worker[b1.nworkers++] = w3;

        b1.print(System.err); System.err.print("\n");
        b2.print(System.err); System.err.print("\n");
        w1.print(System.err); System.err.print("\n");
        w2.print(System.err); System.err.print("\n");
        w3.print(System.err); System.err.print("\n");
    }
}

package seit_1;
import java.io.PrintStream;

public class Person
{
    public Person(String n, int d, int m, int y)
    {
        name = n;
        dob_d = d;
        dob_m = m;
        dob_y = y;

        boss = null;
        worker = null;
        nworkers = 0;
    }

    public void print(PrintStream ps)
    {
        ps.print(String.format("%s: born on %02d/%02d/%4d", name, dob_d, dob_m,
dob_y));
        if (type == 1)
        {
            ps.print(" bosses: ");
            for (int i = 0; i < nworkers; i++)
                ps.print(worker[i].name+" ");
        }
        else
            ps.print(" is bossed by "+boss.name);
    }

    public String name;
    public int dob_d, dob_m, dob_y; // date of birth
    public int type; // 1 = Boss, 2 = worker
    public Person boss;
    public Person[] worker;

```

```
public int nworkers; 19seit_L01_exercise_code.txt
}
```

Output

```
ddd: born on 07/08/1997 bosses: aaa bbb ccc
eee: born on 09/10/1999 bosses:
aaa: born on 01/02/1991 is bossed by ddd
bbb: born on 03/04/1993 is bossed by ddd
ccc: born on 05/06/1995 is bossed by ddd
```