

Inheritance in Java



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By the end of this video you will be able to...

- Explain an “is-a” relationship between classes

What did we want?

1. Keep common behavior in one class
2. Split different behavior into separate classes
3. Keep all of the objects in a single data structure

Reference

Object

Person p =

???

new Person();

Student s =

new Student();

Person p = new Person();

Reference

Object

Person p =

new Person();

Student s =

new Student();

Person p = new Person();

A Person "is-a" Person



Reference

Object

Person p =

new Person();

Student s =

???

new Student();

Student s = new Student();

Reference

Object

Person p =

new Person();

Student s =

new Student();

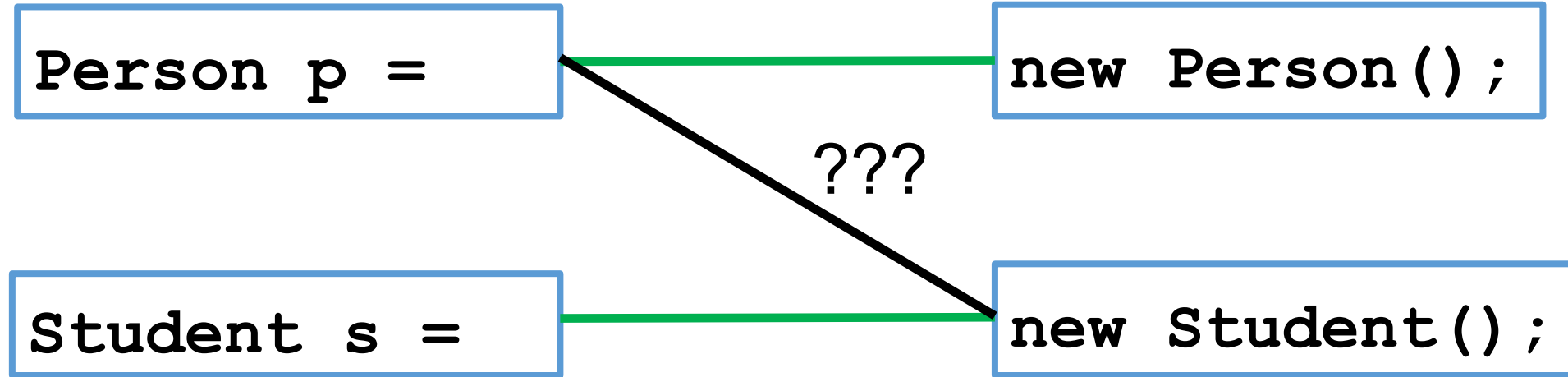
Student s = new Student();

A Student "is-a" Student



Reference

Object



`Person p = new Student();`

Reference

Object

Person p =

new Person();

Student s =

new Student();

Person p = new Student();

A Student "is-a" Person

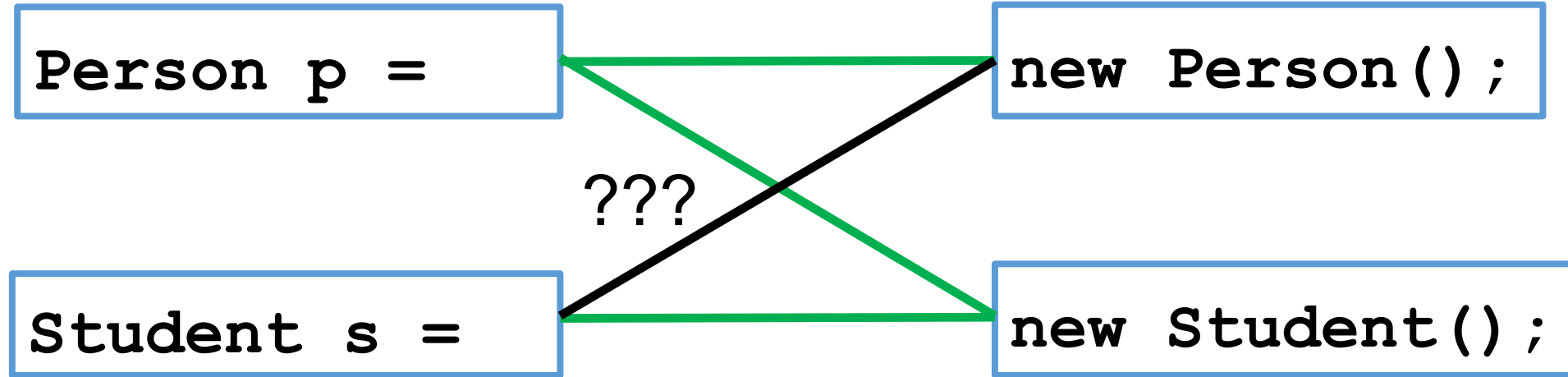


```
// in main
Person[] p = new Person[3];
p[0] = new Person();
p[1] = new Student();
p[2] = new Faculty();
```

**A `Person` array CAN store
`Student` and `Faculty` objects**

Reference

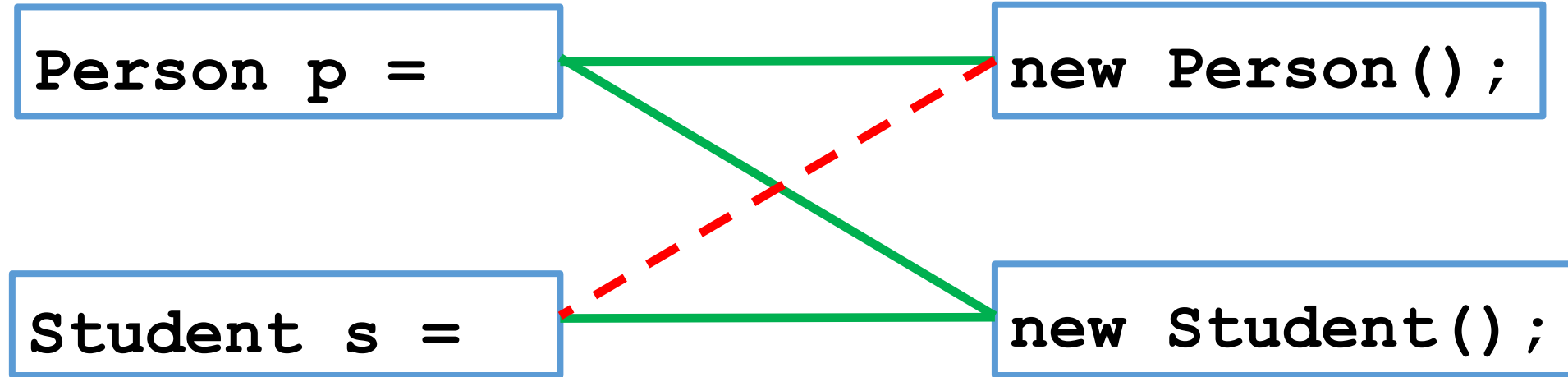
Object



`Student s = new Person();`

Reference

Object



Student s = new Person() ;

