Inheritance: Concept Challenge

Concept Challenge

- **Pause** Try to solve the problem yourself
- **Discuss** with other learners (if you can)
- **Watch** the UCSD learners video
- **Confirm** your understanding with our explanation

```
public class Person {
 private String name;

 public Person( String n ) {
  super();
  this.name = n;
 }
 public void setName( String n ) {
  this.name = n;
 }
}
```

```
public class Student extends Person {
 public Student () {
  this.setName("Student");
 }
}
```

```
Student s = new Student();
```

Start IVQ

```
public class Person {
 private String name;

 public Person( String n ) {
  super();
  this.name = n;
 }
 public void setName( String n ) {
  this.name = n;
 }
}
```

```
public class Student extends Person {
 // changed for example
 public Student () {
  this.setName("Student");
 }
}
```

<IVQ placeholder> (D – no default ctor in Person)

Suppose you call:

Student s = new Student();

What will be the name variable for this object?

A. “Student”
B. “Undefined”
C. null
D. Compile Error
E. Runtime Error

End IVQ / Start Discussion

```
public class Person {
 private String name;

 public Person( String n ) {
  super();
  this.name = n;
 }
 public void setName( String n) {
  this.name = n;
 }
}
```

```
public class Student extends Person {
 public Student () {
  this.setName("Student");
 }
}
```

```
Student s = new Student();
```

ERROR: Implicit super constructor Person() is undefined. Must explicitly invoke another constructor

```
public class Person {
 private String name;

 public Person( String n ) {
  super();
  this.name = n;
 }
 public void setName( String n) {
  this.name = n;
 }
}
```

```
Student s = new Student();
```

super()

```
public class Student extends Person {
 public Student () {
  this.setName("Student");
 }
}
```