

Inheritance: Concept Challenge



This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/)
by Christine Alvarado, Mia Minnes, and Leo Porter, 2015.

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 ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```



Start IVQ

```
public class Person {  
    private String name;  
  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```

<IVQ placeholder> (B)
Suppose you call:
Student s = new Student();

What is the order of statements
printed?

- A. #1 #2 #3
- B. #1 #3 #2
- C. #3 #2 #1
- D. #3 #1 #2
- E. None of the above



End IVQ / Start Discussion

```
public class Person {  
    private String name;  
  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```

```
public class Person {  
    private String name;  
  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```



```
public class Person {  
    private String name;  
  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```

```
public class Person {  
    private String name;  
  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```

```
public class Person {  
    private String name;  
  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```

```
public class Person {  
    private String name;  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

super?

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```

```
public class Person extends Object {  
    private String name;  
  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

super!

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```

```
public class Person {  
    private String name;  
  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```

```
public class Person {  
    private String name;  
  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```

```
public class Person {  
    private String name;  
  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

Output:

#1

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```



```
public class Person {  
    private String name;  
  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

Output:

#1

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```

```
public class Person {  
    private String name;  
  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

Output:

#1 #3

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```

```
public class Person {  
    private String name;  
  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

Output:

#1 #3

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```

```
public class Person {  
    private String name;  
  
    public Person( String n ) {  
        this.name = n;  
        System.out.print("#1 ");  
    }  
}
```

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

Output:

#1 #3 #2

```
public class Student extends Person {  
    public Student () {  
        this("Student");  
        System.out.print("#2 ");  
    }  
  
    public Student( String n ) {  
        super(n);  
        System.out.print("#3 ");  
    }  
}
```