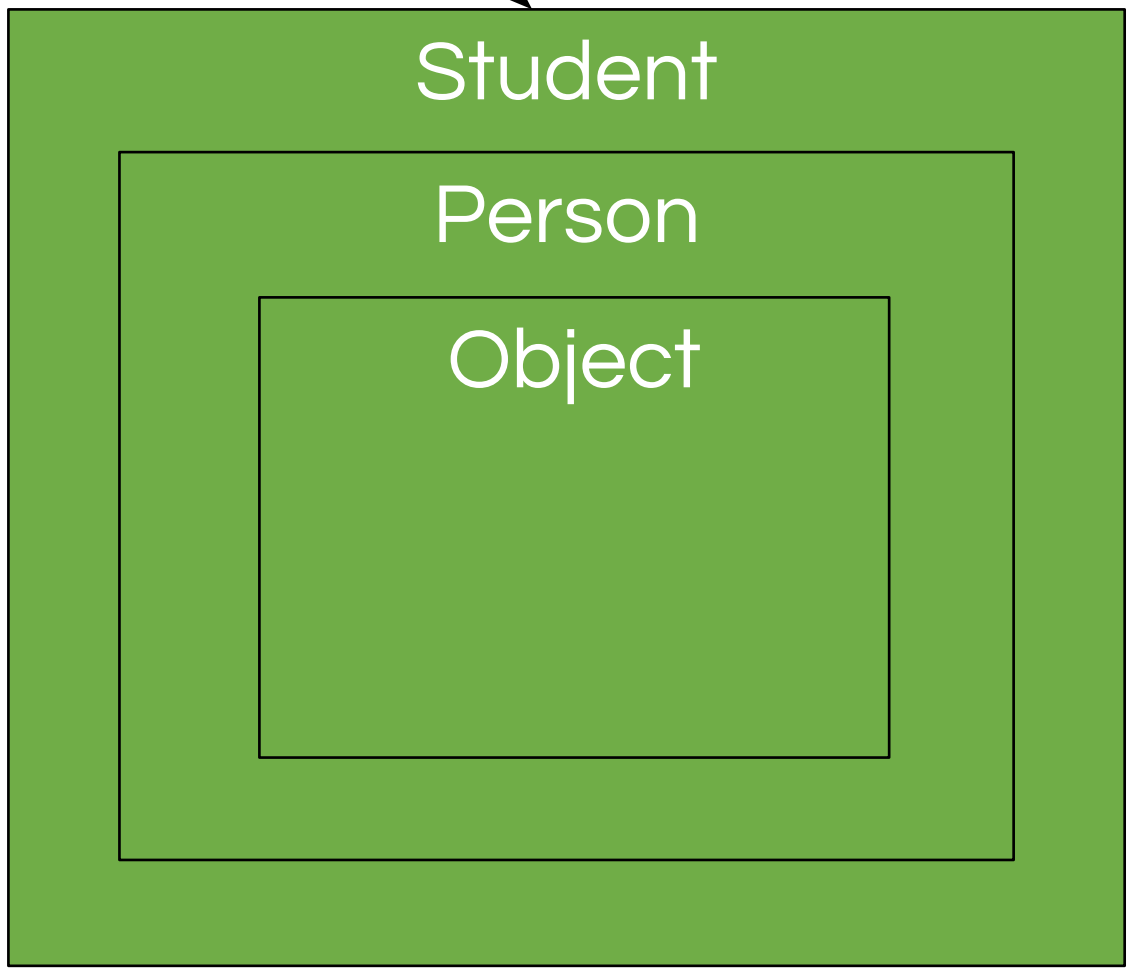
Initializing Variables in a Class Hierarchy

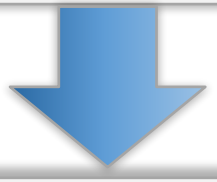
By the end of this video you will be able to…

- Use same-class and super class constructors in class creation

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



```
public class Student extends Person
{
}
```



```
public class Student extends Person
{
 public Student()
 {
    super();
 }
}
```

But how do we initialize `name` ?

```
public class Person extends Object
{
 private String name;

 public Person() {
    super();
 }
}
```

Initialize `name` variable

```
public class Person extends Object
{
 private String name;

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

```
public class Person extends Object
{
 private String name;

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

ERROR!

`super()` has to be the first line!

```
public class Person extends Object
{
 private String name;

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

```
public class Person extends Object
{
 private String name;

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

```
public class Student extends Person
{
 public Student()
 {
   super();
 }
}
```

Initialize `name` variable in student

```
public class Person extends Object
{
 private String name;

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

```
public class Student extends Person
{
 public Student( String n )
 {
  super();
  this.name = n;
 }
}
```

```
public class Person extends Object
{
 private String name;

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

```
public class Student extends Person
{
 public Student( String n )
 {
  super();
  this.name = n;
  super(n);
 }
}
```

```
public class Student extends Person
{
 public Student( String n )
 {
    super(n);
 }
}
```

Let's add a no-arg constructor

```
public class Student extends Person
{
 public Student( String n )
 {
  super(n);
 }

 public Student ()
 {
  super( "Student" );
 }
}
```

```
public class Student extends Person
{
 public Student( String n )
 {
  super(n);
 }

 public Student ()
 {
  this( "Student" );
 }
}
```

Use our same class constructor