

New — make a
Static Class

Mr. Neat
Java

Review

What is psvm?

```
public class starter{  
    public static void main(String args[])  
    {  
        // blah, blah, blah  
    }  
}
```

```
public class starter{  
    public static void main(String args[])  
    {  
        // blah, blah, blah  
    }  
}
```

```
public class another  
{  
    private starter joe;  
    joe = new starter();  
    joe.main();  
    // blah, blah  
}
```

Is this how
psvm is called?

JVM calls `psvm` to start the application.

If we were to call `joe.main()`, we would have to construct `joe` first.

How could we construct joe
first if the psvm is the method
that the JVM calls to
start the application?

Wow!

So, psvm is a method of a class, but it has no object!

It is static!!!!

```
public class starter{  
    public static void main(String args[])  
    {  
        // blah, blah, blah  
    }  
}
```

JVM

starter.main()

// sort of what is happening

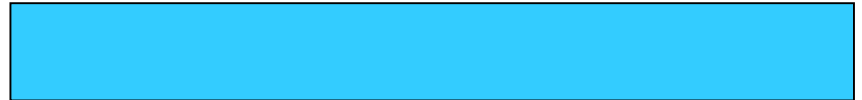
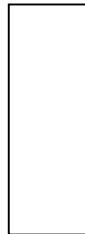
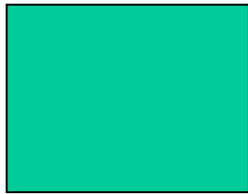
So far, we have constructed
an object of a class to call
the class methods:

```
Rectangle tom;
```

```
tom = new Rectangle(5,5,5,5);
```

```
tom.translate(5,5);
```

These objects have data values associated with each one.



What if a class has
methods, but no data?

Like, the Math class...
min, max, abs, pow,...

What data would describe
an object of the Math class?

Math methods: `Math.abs()`

Math utilities operate on the values passed into the method's parameters....
no objects are required.

Math methods: Math.abs()

```
public class Math
{
    public static int abs(int value)
    {
        int result;
        result = value;
        if(value < 0)
        {
            result = - value;
        }
        return result;
    }
}
```

result is calculated directly from the method's formal parameter.

```
public class Math
{
    public static int abs(int value)
    {
        int result;
        // blah, blah....
    }
}
```

```
public class another
{
    int sam;
    Math.abs(sam);
    // blah, blah
}
```

Lab

- Make a static class called CVMATH
- Put your findMin method into the new class
- Test it. Call findMin from your psvm