else if statements

Mr. Neat
Java

else if statements

What if you wrote a program that asked "Who was buried in General Grant's Tomb?"

User's could respond:
-Grant
-GRANT
-grant……all are correct.

Using what you know...

```
nesting if statements

if(guess.equals("Grant"))
{
        System.out.print("correct");
}
else
{
        if(guess.equals("grant"))
        {
                System.out.print("correct");
        }
        else
        {
                if(guess.equals("GRANT"))
                {
                        System.out.print("correct");
                }
                else
                {
                        System.out.print("wrong");
                } // endif
        } // endif
} //endif
```
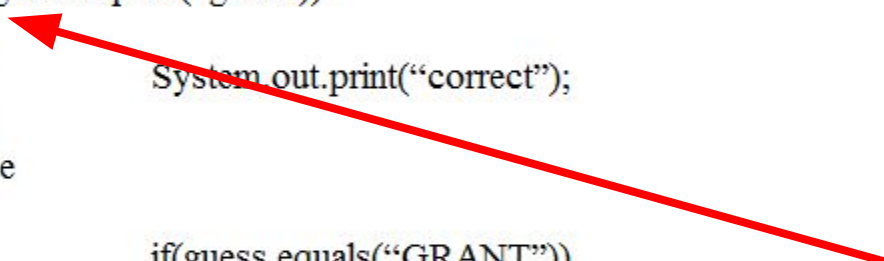
Grant

grant

GRANT

Using what you know...

```
nesting if statements

if(guess.equals("Grant"))
{
         System.out.print("correct");

}
else
{
         if(guess.equals("grant"))
         {
                 System.out.print("correct");

         }
         else
         {
                 if(guess.equals("GRANT"))
                 {
                         System.out.print("correct");

                 }
                 else
                 {
                         System.out.print("wrong");
                 } // endif
         } // endif
} //endif
```

This is called "nesting" if statements

else if statements

- Nesting can be in *if* part or *else* part.
- Nesting can be avoided with the use of *else if(condition)*.

Something new:
else if statements
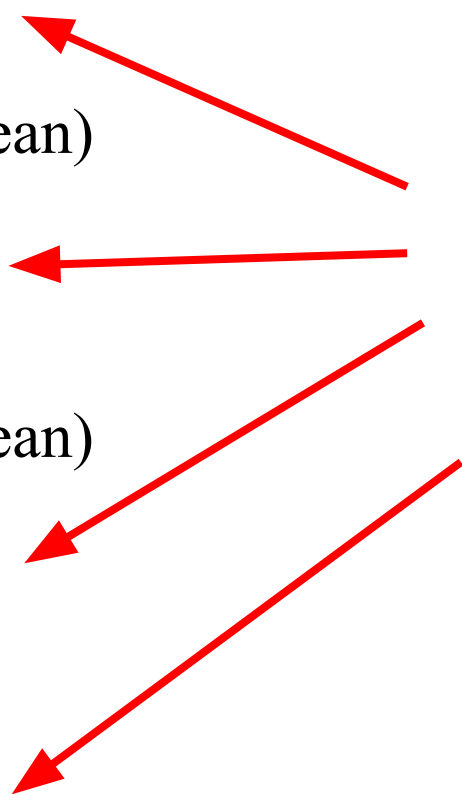
```
if(boolean)
{

}
else if(boolean)
{

}
else if(boolean)
{

}
else
{

}
```

only one of these
will fire

Something new:
else if statements
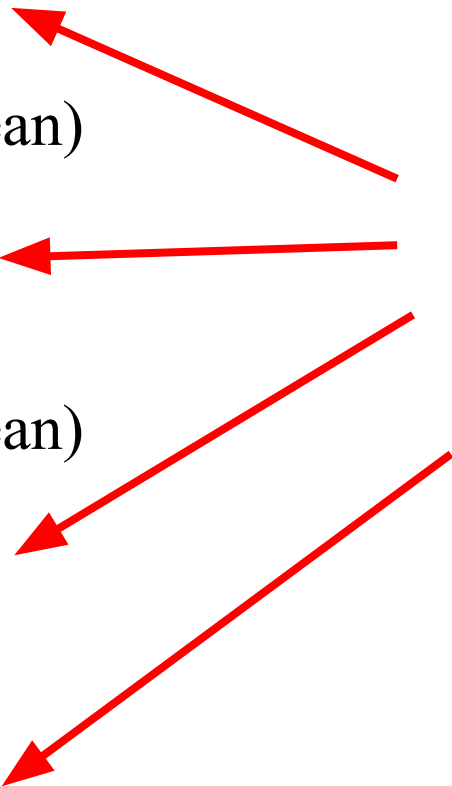
```
if(boolean)
{

}
else if(boolean)
{

}
else if(boolean)
{

}
else
{

}
```

once one boolean is true, the others are skipped

else if statements

```
if(boolean)
{


}
else if(boolean)
{


}
else if(boolean)
{


}
else
{


}
```

REAL important
it is optional!
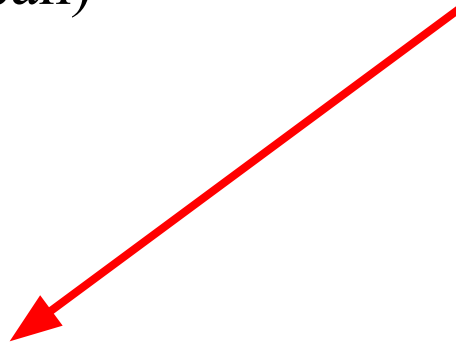
Something new:
else if statements

```
if(boolean)
{


}
else if(boolean)
{


}
else if(boolean)
{


}
else
{


}
```

Always take the option
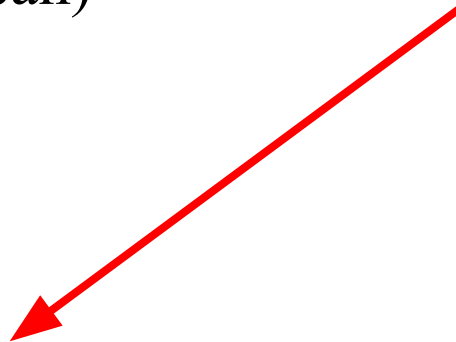
Something new:
else if statements

```
if(boolean)
{


}
else if(boolean)
{


}
else if(boolean)
{


}
else
{


}
```
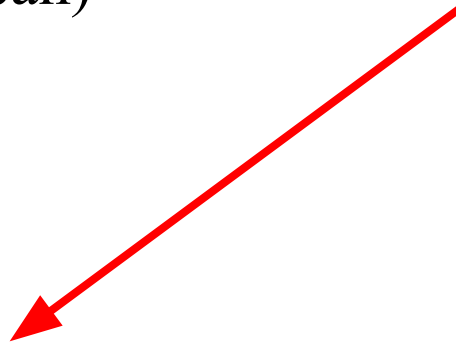
guarantees that one block of code fires

Something new:
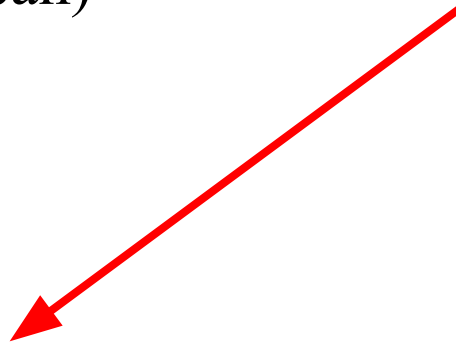## else if statements

```
if(boolean)
{

}
else if(boolean)
{

}
else if(boolean)
{

}
```

without it, if all booleans are false, then nothing happens

Something new:
else if statements
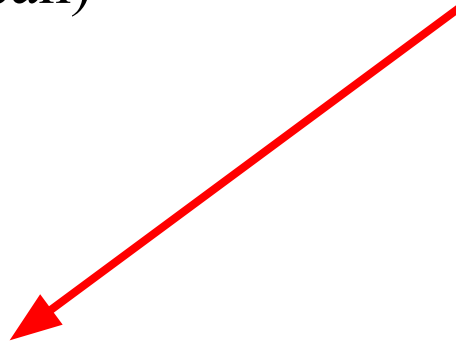
```
if(boolean)
{

}
else if(boolean)
{

}
else if(boolean)
{

}
```

REALLY hard to debug

Lab

- Make 1, labeled, recycling Rectangle
- The dimensions of the Rectangle should be
  - width = 50
  - height = 100
- Randomly place the Rectangle on one of the "roads"
- Color the Rect as follows:
  - first road - red
  - second road - white
  - third road - blue
  - all other roads - green
- the Rectangle should stay between the lines (stay on the "road")