Step Into Java: not

Mr. Neat Java

not statement (!)

- determine if something is not true.

- ! is placed in front of any condition that could be true or false.

not statement (!)

```
if(!guess.equals("1812"))
{
    System.out.print("wrong");
}
```

not statement (!)

-What happens if you place two not operators consecutively: !!?

- How could you rewrite the 1812 lab without using an else statement?

more on *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.

more on *if* statements...

nesting if statements

```java
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

more on *if* statements...

- You can nest as many *if-endif* and *if-else-endif* blocks as you like

- Every *if*-statement must have a matching *end-if* statement

- Every *else*-statement must be between an *if*-statement and an *endif*-statement

more on *if* statements...

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

more on *if* statements...

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

more on *if* statements...

else if rules

- as many as you like

- between *if* and *endif*

- before an *else* (if there is one)

more on *if* statements...

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

← strongly recommend

more on if statements...

Lab:

- Write a program that asks the 1812 question.

- Output the appropriate message, including if the guess was off by one.

- note: All with Strings