

CS 302 - Week 3

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What is wrong with this?

```
int value == 6;
boolean 3or6value;
if ( value == 3 || 6) {
    System.out.println("value is 3 or 6");
    value3or6 == "true";
if ( 0 < value < 10 );
    System.out.println('value < 10')
    System.out.println( "value=" value);
```

Console Output

```
System.out.print( "Choice? ");
```

```
int count = 11;
```

```
System.out.println( count);
```

```
System.out.println( "Count: " + count + 1);
```

- escape sequences `\n`, `\"`, `\\`

```
System.out.print( "Fred says \"hello\"\\nthis morning.");
```

Lazy River



Side trip?

```
boolean tired = true;
```

```
if ( tired) {
```

```
    System.out.println("take break");
```

```
}
```

Which side of the Island?

```
boolean sunny = false;
if ( sunny) {
    System.out.print("sunny");
} else {
    System.out.print("not sunny");
}
System.out.println( " and back together");
```

Input

```
import java.util.Scanner;
```

```
...
```

```
Scanner scnr = new Scanner( System.in);
```

```
double radius;
```

```
if ( scnr.hasNextDouble()) {  
    radius = scnr.nextDouble();
```

```
}
```

What is wrong with this?

```
int value = 6;
boolean found3or6;
if ( value == 3 || value == 6) {
    System.out.println("value is 3 or 6");
    found3or6 = true;
}
if ( 0 < value && value < 10 ){
    System.out.println("value < 10");
    System.out.println( "value=" + value);
}
```


Course Notes

- Syllabus

- Readings - type in programs, change
- Program p1
- Piazza (avg response time 27min)
- CodeLab
- Team Labs - presence and participation
- Consulting Hours
- My office hours: Tues 9-11am, Wed 2:45-4:45pm

- WES-CS CompSci 304

- Instructor: tracy.lewiswilliams@wisc.edu

What happens with code

Bombetoka Bay
Madagascar



While loop (indefinite)

```
boolean finished = false;  
while ( !finished) {  
    System.out.println("in while loop");  
}
```

Convert this While to a For loop

```
for ( int a = 1; a < 5 ; a += 1 ) {  
    System.out.println( "a=" + a);  
}
```

Do loop (indefinite - at least once)

```
do {
```

```
} while ( !finished);
```

```
while ( !finished) { //indefinite - body may never execute  
}
```

```
for ( int i=1; i < 5; i++) { //definite  
}
```

Do loop (indefinite - at least once)

```
Scanner scnr = new Scanner(System.in);
```

```
boolean finished = false;
```

```
do {
```

```
    System.out.print("type quit to end:");
```

```
    String result = scnr.nextLine();
```

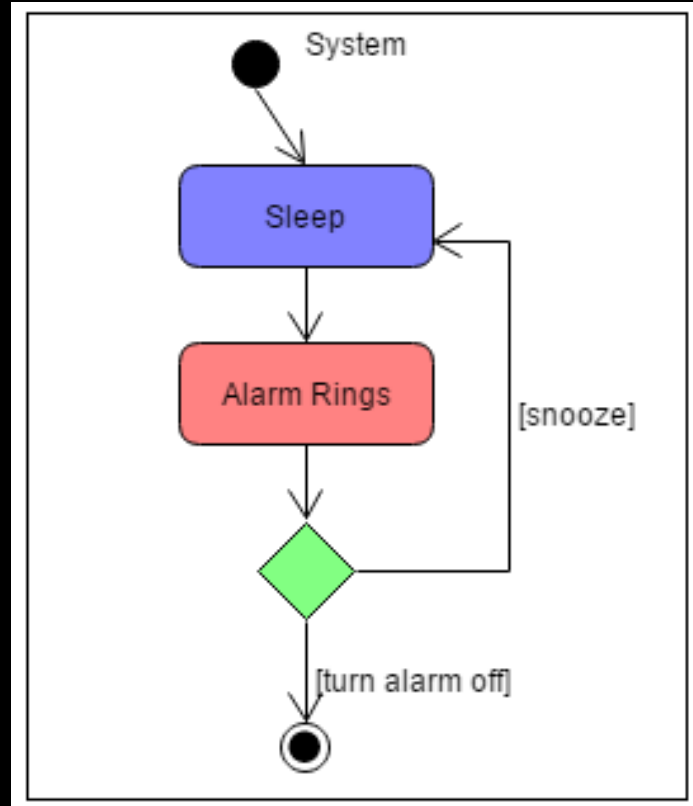
```
    if ( result.equals( "quit" )) {
```

```
        finished = true;
```

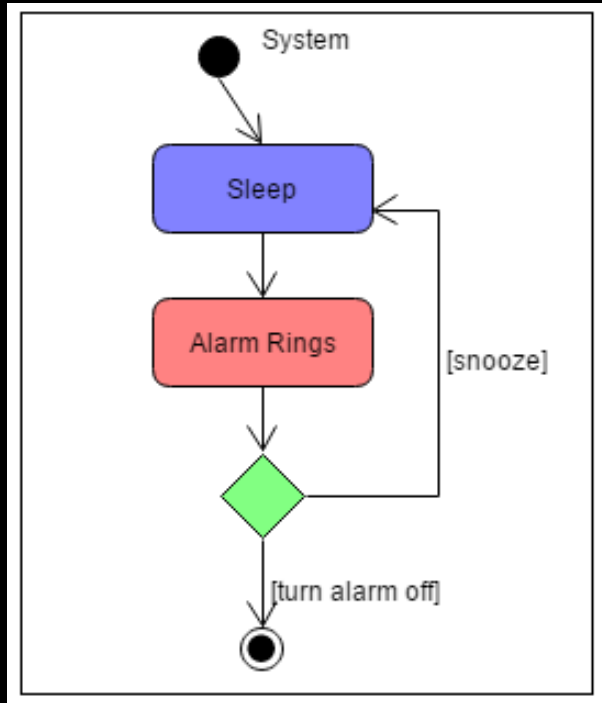
```
    }
```

```
} while ( !finished);
```

UML Activity Diagram (Flow Chart)



Arrange Code



```
//declarations...
```

```
off = true;
```

```
System.out.println("RING, RING");
```

```
do {
```

```
    System.out.print("Enter to snooze or \"off\"
```

```
Enter");
```

```
    if ( response.equals("off")) {
```

```
        off = false;
```

```
    }
```

```
} while ( !off);
```


What does this print out?

```
for ( int i = -SIZE; i <= SIZE; i+=1) {  
    for ( int j = Math.abs(i); j > 0; j--) {  
        System.out.print(" ");  
    }  
    for ( int k = 2*(SIZE-Math.abs(i))+1; k > 0; k--) {  
        System.out.print("*");  
    }  
    System.out.print("\n");  
}
```