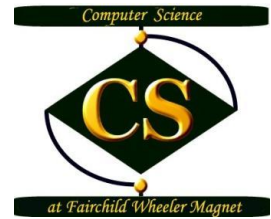




Decision Structures (1)



```
import java.util.Scanner;  
public class MyClass {  
  
    static Scanner in = new Scanner(System.in);  
    public static void main()  
    {
```

Your stuff goes here

```
}  
}
```



Try to figure out what would come out for each code segment and then type it in to the computer to check.

Keep the variables for the segments that use them

```
int a = 12;  
int b = 5;
```

```
1.          if (a > 4)  
             System.out.println("Mary");  
          if (a > 4)  
             System.out.println("Sue");
```

2. if (b > 7)
 System.out.println("Mary");
 if (b < 9)
 System.out.println("Sue");

3. if (a >= 12)
 System.out.println("Mary");
 if (a <= 12)
 System.out.println("Sue");

4. if (a > 10)
 System.out.println("Mary");
 if (b > 10)
 System.out.println("Sue");

5. if (a > 4)
 System.out.println("Mary");
 if (a > 4)
 System.out.println("Sue");

Now switch your variables to use m and n

```
int m = 5;  
int n = 10;
```

6. if (m > 4)
 System.out.println("Mary");
 if (m > 4)
 System.out.println("Sue");

7. if (m == 5)
 System.out.println("Mary");
 if (n < 9)
 System.out.println("Sue");

```
8.      if (n != 12)                // != means not equal to
        System.out.println("Mary");
      if (m <= 12)
        System.out.println("Sue");
```

```
9.      if (m > 10)
           System.out.println("Mary");
      if (n > 10)
           System.out.println("Sue");
```

```
10.         if (m != 4)
                System.out.println("Mary");
        if (n > 4)
                System.out.println("Sue");
```

```
11.         if (m >= 5)
                System.out.println("Mary");
        if (n > 5)
                System.out.println("Sue");
```

```
12.      if (m == 3)
           System.out.println("Mary");
           if (m > 5)
               System.out.println("Sue");
```

Switch your variables again (make sure you are trying to figure out the answers first)

```
int k = 12;  
int p = 4;
```

```
13.         if (k == 4)                                // we use == for equals
            System.out.println("Mary");
        if (k > 4)
            System.out.println("Sue");
```

14. if (p > 2)
 System.out.println("Mary");
if (k < 15)
 System.out.println("Sue");
15. if (k >= 12)
 System.out.println("Mary");
if (p <= 4)
 System.out.println("Sue");
16. if (k > 10)
 System.out.println("Mary");
 if (k > 17)
 System.out.println("Sue");
17. if (p > 4)
 System.out.println("Mary");
 if (p > 4)
 System.out.println("Sue");
18. if (p >= 5)
 System.out.println("Mary");
if (k > 5)
 System.out.println("Sue");
19. if (k != 5)
 System.out.println("Mary");
 if (p > 5)
 System.out.println("Sue");