Lab Goal: This lab was designed to teach you how to use for loops and a little bit about base conversion.

Lab Description: Convert a base 2 – binary number to base ten.

```
1101 base 2 = 13 base 10
1111 base 2 = 15 base 10
11111 base 2 = 31 base 10
10000 base 2 = 16 base 10
```

```
How does binary work?
Binary is a power of 2 number system.

2<sup>4</sup>2<sup>3</sup> 2<sup>2</sup> 2<sup>1</sup> 2<sup>0</sup>
168 4 2 1
11 0 1 0= 26
```

Sample Data:

Files Needed ::

TwoToTen.java Lab08j.java

Sample Output:

```
1010 == 10

1100 == 12

1110 == 14

1111 == 15

11111 == 31

11111 == 63

1110101 == 117

10101010101 == 1365

1010101010110 == 5462

111111111111111111 == 262143
```