

Lab Goal : This lab was designed to teach you how to use an ArrayList.

Lab Description : Write a number class that can be used to test numbers for odd, even, and perfect.

Sample Data :

7
496

Sample Output :

7
7 isOdd == true
7 isPerfect == false

496
496 isOdd == false
496 isPerfect == true

Files Needed ::

Number.java
NumberTester.java

ODD / EVEN NUMBERS

ODD – any number when divided by 2 that has a remainder of 1

EVEN – any number when divided by 2 that has a remainder of 0

% - modulus – used to find the remainder of division

PERFECT NUMBERS

A perfect number is any number equal to the sum of its divisors.

6 is perfect because it is equal to the sum of its divisors.

The divisors of 6 are 1 2 3
 $1 + 2 + 3 = 6$