Long Wrapper

Click to continue

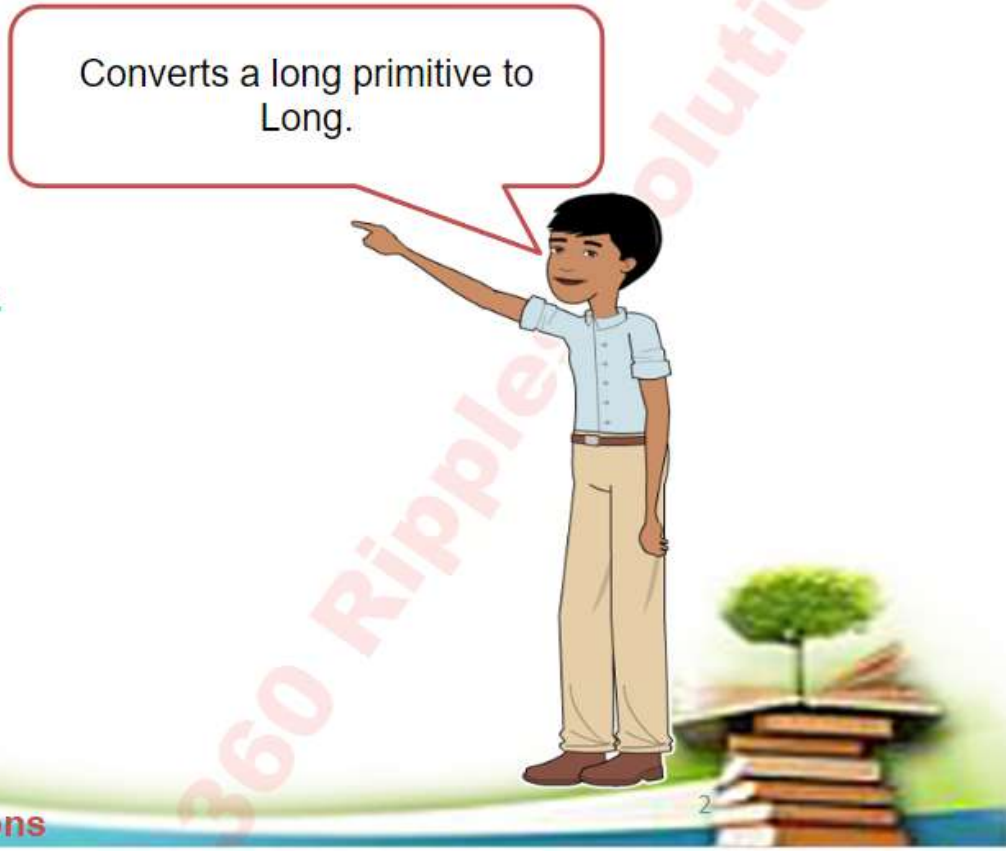
- The Long class wraps a long primitive value as a Long object.
- Long wrapper provides many API's for processing and transforming the long data.

Illustration 1: Converting a String to a Long Wrapper

```
Long empId= new Long("12345")
```

Illustration 2: Converting a long primitive to a Long Wrapper.

```
Long empId = new Long(12345l);
```



Float Wrapper

Click to continue

- The *Float* class wraps a primitive *float* value in an object.
- This class similar to Integer wrapper provides many API's for processing/transformation.

Tan 60° = 1.732

Try it out – Float Wrapper

Click to continue

1. Create a java class "FloatExample" in "com.demo.wrapper" package.
2. Create a main method and create two Float objects "num1" and "num2" with values 18.25f and 12.65f. Implement the following logic,

Problem 1: Compares two float variables and displays the maximum value.

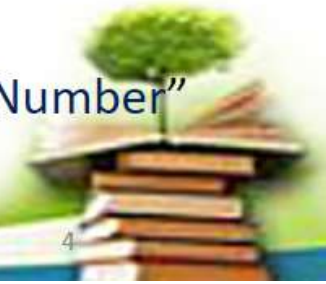
Output : " The<value> is bigger than <value>"

Problem 2: Converts a String value of "4321" to a float value and add 13.45f

Output: The string should be converted into a float incremented to 13.45 and display the result.

Problem 3: Checks if the specified float value num1 is a number or not.

Output: If the number is not a number display the message "This is not a Number" else "This is a Number"



Double Wrapper

Click to continue

- The *Double* class wraps primitive type *double* in an object.
- This class similar to other wrapper provides many API's for processing/transformation.

Double is similar to a float, the difference is the size double is 64 bits and float is 32 bits.

Where do we use it?

This is used for storing currency values.

Tax = 2020.60

Byte Wrapper

Click to continue

- The Byte class wraps a byte primitive value to an object.
- This class similar to other wrapper provides many API's for processing/transformation.

Where do we use it?

This is used to store numbers ranging between -128 and 127.

Illustration 1 : String to a Byte Wrapper

```
Byte id = new Byte("23")
```

Illustration 2 : Primitive to a Byte Wrapper

```
Byte id = new Byte(23)
```

Boolean Wrapper

Click to continue

The Boolean class wraps a value of the primitive type boolean in an object.

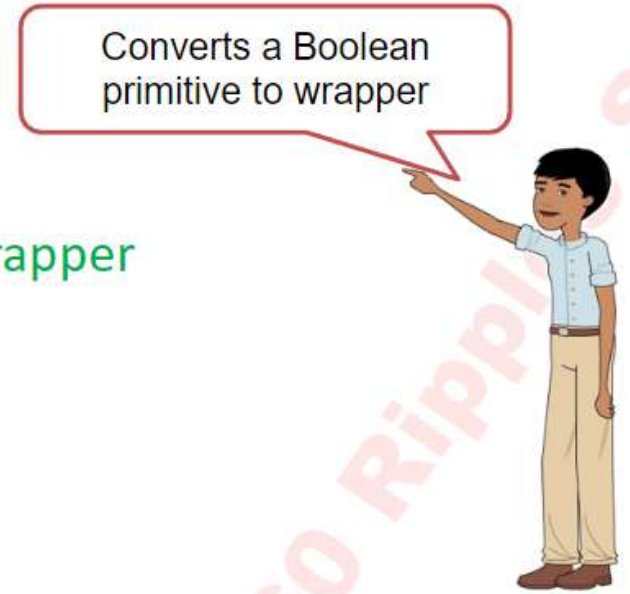
This class similar to other wrapper provides many API's for processing/transformation.

Illustration 1: String to a Boolean Wrapper

```
Boolean status = new Boolean("true")
```

Illustration 2: Boolean primitive to a Boolean Wrapper

```
Boolean status = new  Boolean(false);
```



Auto Boxing

Click to continue

Autoboxing is a technique introduced in Java 1.5. It is a feature where a primitive is automatically converted to a wrapper.

Example:

Double d =100.00

Few More examples:

- Integer d= 100
- Boolean b = false
- Long l = 100l
- Char c = ‘c’

Unboxing

Click to continue

Unboxing is a feature where a wrapper is automatically converted to a primitive.

Example:

```
Double d1 = new Double(100.00);
double d = d1;
```

Few More examples:

- Integer I = new Integer(100)
  int d= i
- Boolean b = new Boolean(false)
  Boolean f = b