

8/5/2020

MARCH

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1	2	3	4	5	6	7
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22	23	24	25	26	27	28
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APRIL

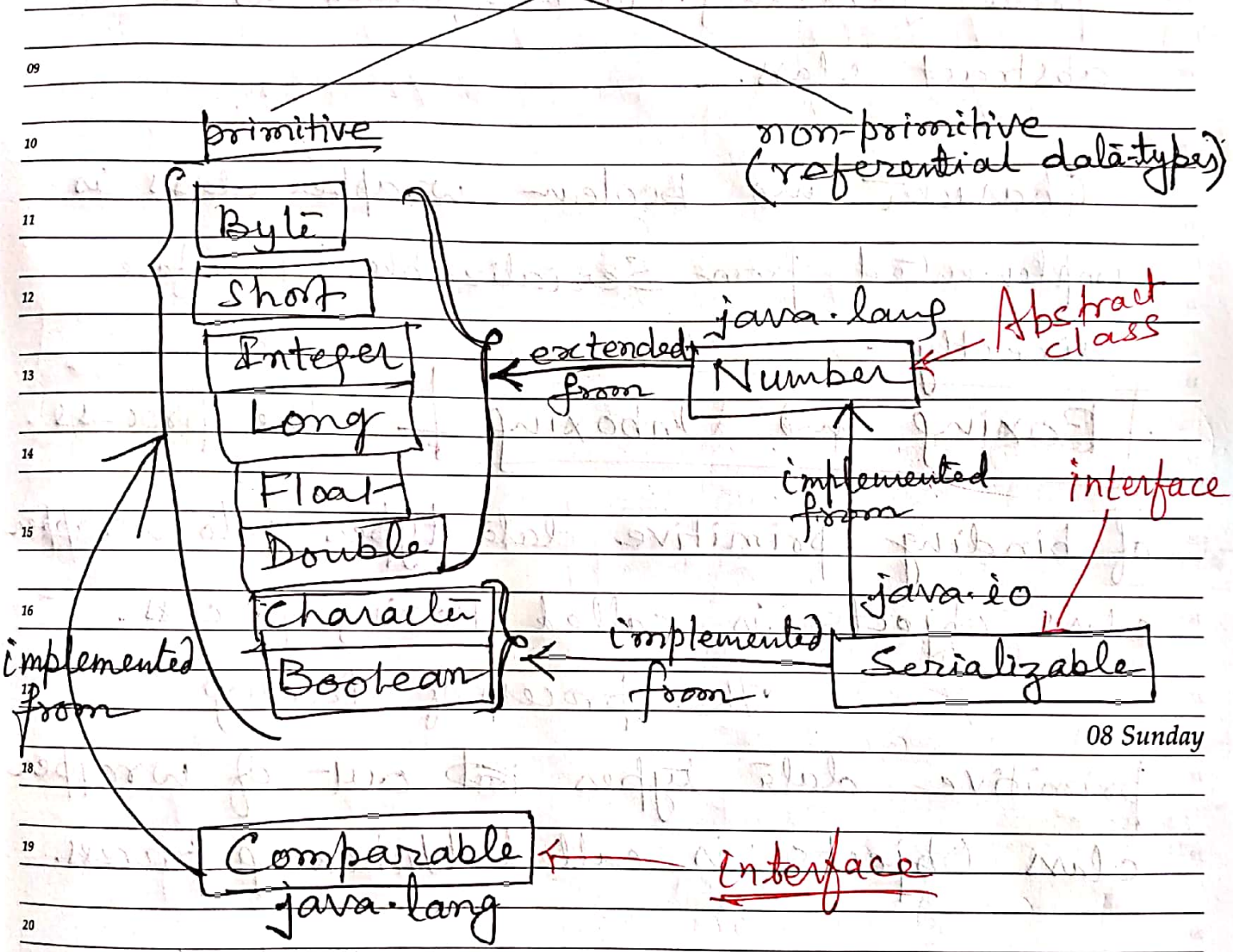
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WRAPPER CLASS in Java

10th week
066-299

07
Saturday

Data types



08 Sunday

All the eight Wrapper classes are implemented from Comparable interface present in java.lang package.

Monday

Six Numeric ^{wrapper} classes are extended from `java.lang.Number`, which is an abstract class.

Character and Boolean wrapper class is implemented from `Serializable` interface directly.

Boxing and Unboxing — The process

of binding primitive data types into wrapper class objects is called Boxing process.

The process of taking primitive data types ~~in~~ out of wrapper class objects is called Unboxing process.

So, whenever we want to perform Boxing process, we take the support of constructors available with wrapper classes. With the support of `valueOf()` method we can also perform Boxing process.

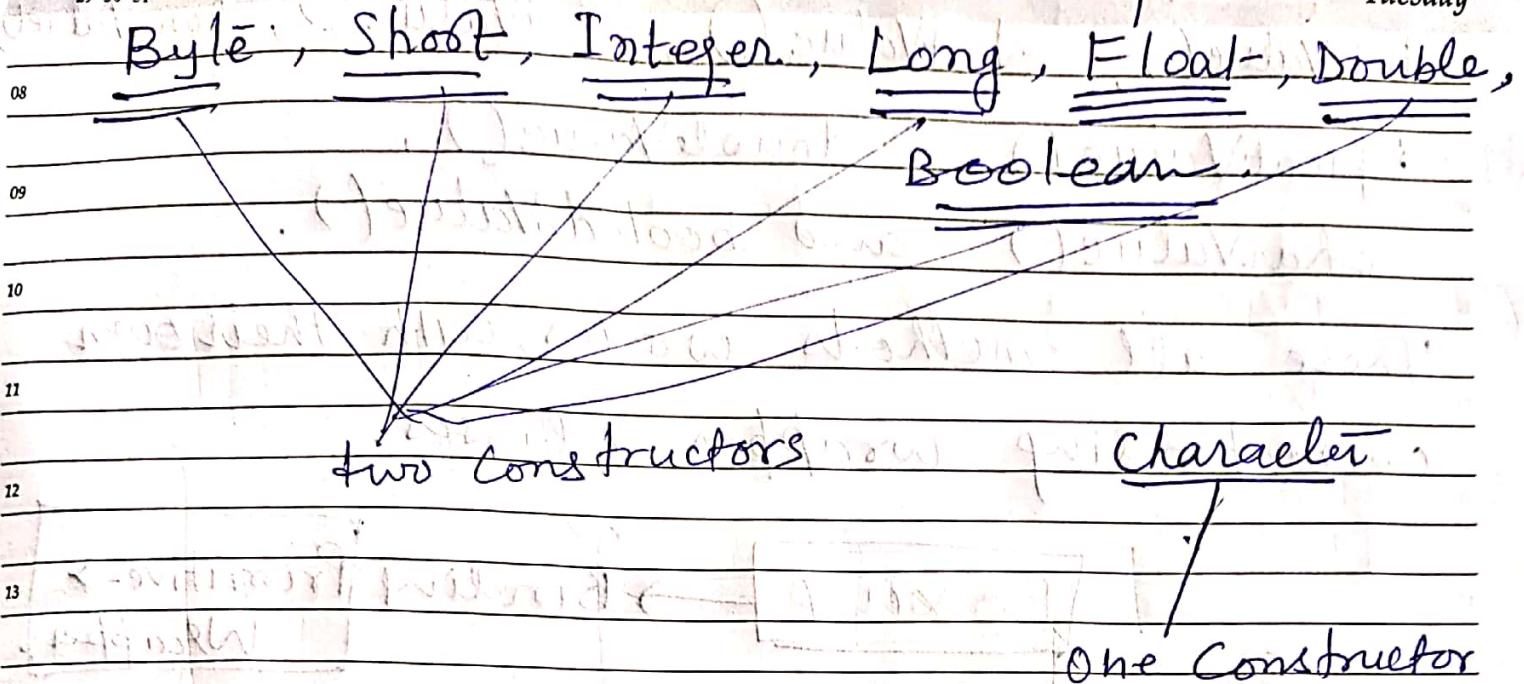
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11th week
069-296

three constructors

10

Tuesday



Byte, Short, Integer, Long, Double, Boolean has two constructors — one for bind its own data type and other for String data.

Float wrapper class has three constructors — one for String data, other for its own data type and third for double data type.

Character has only one constructor.

Unboxing : — Unboxing can be performed by the help of corresponding functions. There are 8 methods are available for performing

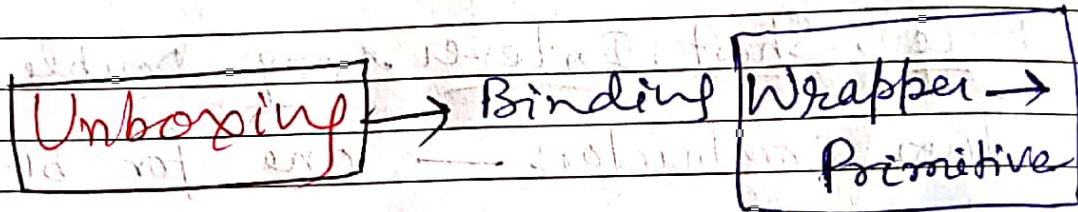
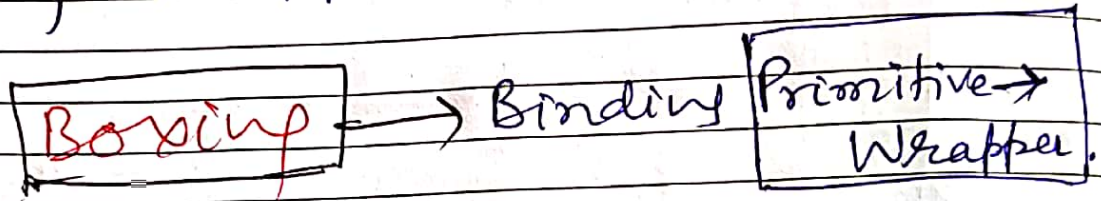
11

Wednesday

Unboxing process : —

byteValue(), shortValue(), intValue(), longValue(),
floatValue(), doubleValue(),
charValue() and booleanValue().

These all methods works with their own corresponding wrapper classes.



data-type Wrapper class Constructors

1. byte	Byte	byte, String
2. short	Short	short, String
3. int	Integer	int, String
4. long	Long	long, String
5. float	Float	float, double, String
6. double	Double	double, String
7. char	Character	char
8. boolean	Boolean	boolean, String

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Example: - To show Boxing and Unboxing process.

class WrapperTest

```
{
    public static void main (String args[])
```

```
{
    // Boxing process using Constructor
```

```
    Integer obj1 = new Integer (125);
```

```
    Integer obj2 = new Integer ("126");
```

```
    // Boxing using valueOf() method
```

```
    Integer obj3 = Integer.valueOf (127);
```

```
    Integer obj4 = Integer.valueOf ("128");
```

```
    System.out.println ("After Boxing Process:");
```

```
    System.out.println ("obj1 = " + obj1);
```

```
    System.out.println ("obj2 = " + obj2);
```

```
    System.out.println ("obj3 = " + obj3);
```

```
    System.out.println ("obj4 = " + obj4);
```

```
    // Unboxing Process
```

```
    int a = obj1.intValue();
```

```
System.out.println ("obj1");
```

```
    String s1 = obj2.toString();
```

```
    int b = obj3.intValue();
```

```
    String s2 = obj4.toString();
```

March

11th week
072-293

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Friday System.out.println("After Unboxing process:-");

System.out.println("a=" + a);

System.out.println("s1=" + s1);

System.out.println("b=" + b);

System.out.println("s2=" + s2);

}

}

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