NFE -> Number Format Exception. All primitive class has two constructors

```
16 int x =10;
17 String s = Integer.toString(x);
19 Constructors:
20 -----
21
22 Integer I = new Integer(10);
23 Integer I = new Integer("10");
24
25
126 Integer I = new Integer("ten");=>NFE
27
28
29
30 Double d= new Double(10.5);
31 Double d= new Double("10.5");
32
33
For Help, press F1
                                        In 26 col 38 36 00 PC ANSI
```

```
33 Boolean b= new Boolean(true);
Boolean b= new Boolean(false);

36 Boolean b = new Boolean(false);

37 Boolean b = new Boolean("true");
Boolean b = new Boolean("false");
```

Valid... If u pass string args content is not important. True and true and TRue-> always true only

If its not True or true -> treat as false

◆ String.txt 35 ◆ Untitled2 55 ◆ Test.java 35

```
39 Boolean b = new Boolean("True");
40 Boolean b = new Boolean("Durga");
41
42
```

In 37 col 31 39 22 PC ANSI

False

39

For Help, press F1

B1==B2 ref comparison ->False

Equals on boolean, all wrapper equlas is overriden to perform content comparison so True

```
---+--1---+--2---+--3---+--4-----5---+--6---+--7---+---8
 1 class Test
 2 □ {
 3
      public static void main(String[] args)
 48
          Boolean b1 = new Boolean("Left");
Boolean b2 = new Boolean("Right");
 5
 6
 7
          System.out.println(b1==b2);
 8
          System.out.println(b1.equals(b2));
 9
      }
10 }
11
```

If u want to create a wrapper object from primitive or String use ValueOf

```
51 3. parseXxx()
52 4. toString()
53
54
55 Integer I = Integer.valueOf(10);
Integer I = Integer.valueOf("10");
57
58
59
60
61
62

• Stringtat is • Untitled2 is • Testjava is For Help, press F1

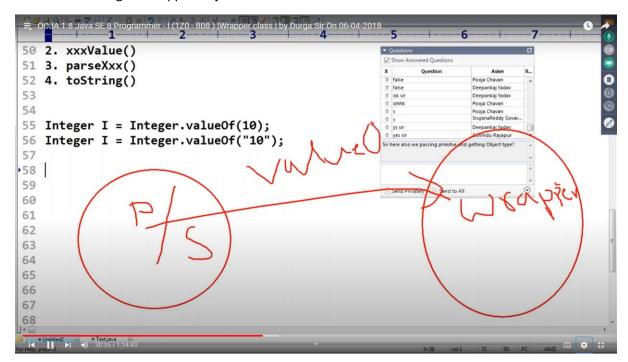
| Integer I | Press P1
| Integer I
```

Sop(I)-> will call toString Method and print the content

False

This is same as \rightarrow new Integer("10")

ValueOF() does not create a new object everytime sometime it reuses. Will discuss in autoboxing Primitive or String to Wrapper Objects



```
58 xxxValue():
59 -----
60 to convert wrapper object to primitive
61
62 byteValue()
63 shortValue()
64 intValue()
65 longValue()
66 floatValue()
67 doubleValue()
68
69
70
71
72
73
74
1 class Test
 2 □ {
 3
      public static void main(String[] args)
 48
 5
         Boolean B = Boolean.valueOf("Durga");
 6
         boolean b = B.booleanValue();
 7
         System.out.println(b);
 8
      }
 9 }
10
```

For Help, press F1

```
1 class Test
 2 □ {
 3
     public static void main(String[] args)
 4 ₪
 5
        Integer I = new Integer(10);
        int i = I.intValue();
 6
 7
        System.out.println(i);
 8
9 }
10
◆ Untitled2 ॐ ◆ Test.java ॐ
For Help, press F1
                                         In 6 col 29 10 38 PC ANSI
```

```
71
72
73
74
75
76 parseXxx()
77
78
79 parseInt()
81 String to primitive
83 java Test 60
*85 int age=Integer.parseInt(args[0]);
87
88
89
* Untitled2 ... * Test.java ... 

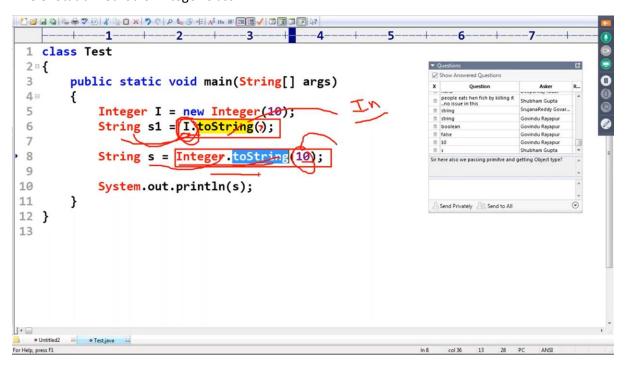
* Help, press r1 ... 37:40 / 1:14:43
```

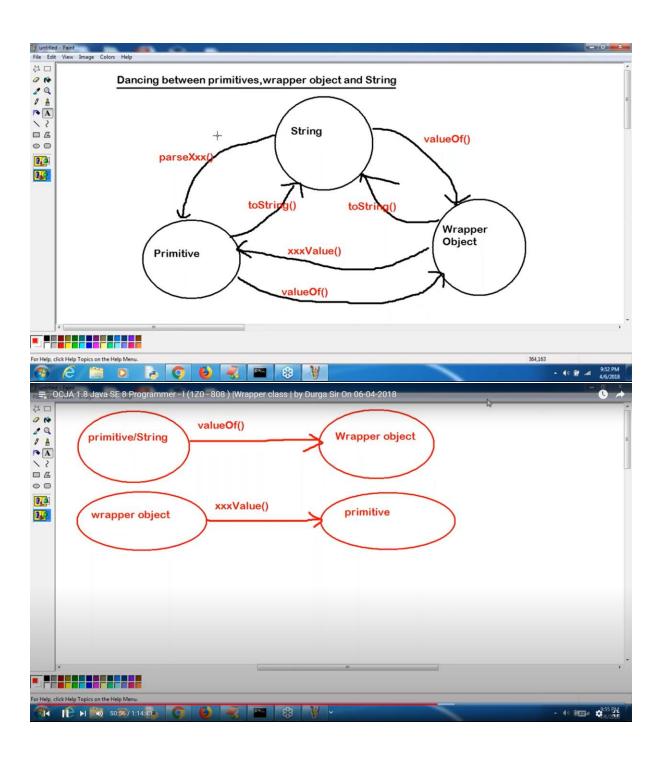
```
---+---<u>1</u>---+---2---+---<u>3</u>3---+---4---+---5---+---6---+---7---+---8-
1 class Test
2 □ {
3
     public static void main(String[] args)
4 ₪
5
        double d = Double.parseDouble("10.5");
        System.out.println(d);
•6
7
8 }
In 6 col 29 9 29 PC ANSI
3---+--5----6---+--7----8-
1 class Test
2 8 {
3
     public static void main(String[] args)
48
5
        boolean b = Boolean.parseBoolean("Salman");
•6
        System.out.println(b);
7
     }
8 }
9
◆ Untitled2 ፡፡ ◆ Test.java ፡፡
For Help, press F1
                                             In 6 col 29 9 29 PC ANSI
```

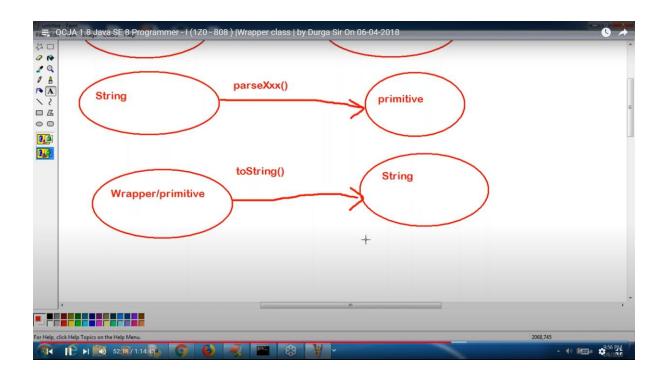
```
1 class Test
2 □ {
       public static void main(String[] args)
3
48
           Integer I = new Integer(10);
5
           String s = I.toString();
6
7
8
           System.out.println(s);
9
       }
10 }
11
```

Line 6 in an Instance method

Line 8- Static Method of Integer Class







```
89
90
91
92 Autoboxing and autounboxing:
93
------
94
95
96 Integer I=Integer Object
97
98
96 Integer I=new Integer(10);I
```

In the place of object assigning Primitive and

For primitive assigning Object

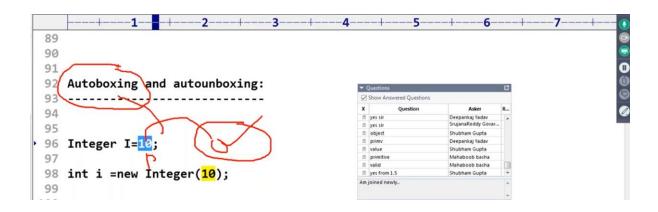
```
96 Integer I=10;
97

98 int i =new Integer(10);
99
100
101
102
103
104
105
106
107

• Untitled2 | • Test,java | • wrapperclasses_will
For Help, press f1

| 198 | col 24 | 115 | 00 | PC | ANSI
```

In the place of Object you provide Primitive, compiler will convert primitive to Object Automatically



Automatic conversion of -> From 1.5 Version

```
----+---1---+---2---+---3----+--<mark>-</mark>4----+---5----+---6----+---7----+--
 89
 90
 91
 92 Autoboxing and autounboxing:
 93 -----
 94
 95
 96 Integer I=10;
 98 int i =new Integer(10);
99
100
101 Autoboxing: from primitive to object
102 Autounboxing: from object to primitive
103
104
105
106
107
In 102 col 39 116 00 PC ANSI
```

```
= OCJA18 Java SE 8 Programmer - I(120 808) | Wrapper class | by Durga Sir On 06-04-2018

101 Autoboxing: from primitive to object
Autounboxing: from object to primitive
103
104
105
106 Boolean b = Boolean.valueOf("True");
107
```

Auto Unboxing

```
106 boolean b = Boolean.valueOf("True");
107
108
```

Auto UnBoxing

```
Integer I = new Integer(10);
int i =I.intValue();
AutoBoxing
Integer i =I.intValue();
Integ
```

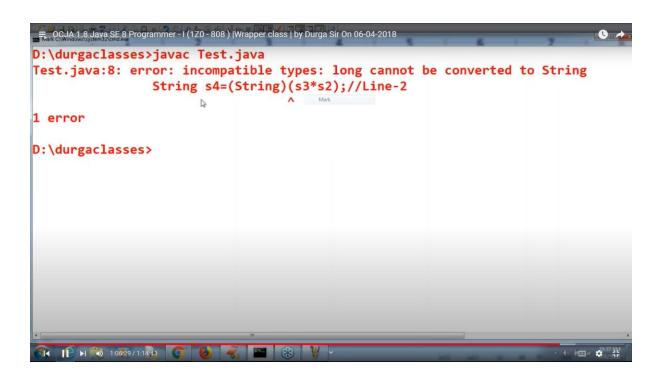
Always expecting String Value what happens when we pass NULL

Always consider as False

Line 8. First Short is converted to Long and Then added with S2. And the assigned to Long No issues there

//Line 2 – cant convert Long to String

```
--1----+-----3----+----4---
 4
          public static void main(String[] args)
 5⋴
 6
                 Short s1=200;
 7
                 Integer s2=400;
 8
                 Long s3=(long)s1+s2;//Line-1
 9
                 String s4=(String)(s3*s2);//Line-2
10
                 System.out.println("Sum is:"+s4);
          }
11
12 }
13
14 What is the result?
15
16 A. Sum is: 600
17 B. Compilation Fails at Line-1
18 C. Compilation Fails at Line-2
19 D. ClassCastException is thrown at Line-1
20 E. ClassCastException is thrown at Line-2
21
For Help, press F1
```



Line 30-> first String to primitive happens

Boolean.parseBoolean("true")

Next

b[0]=new Boolean (true)

b[1] = False

True .. False

```
22
23 Q. Consider the code:
 25 public class Test
26 8 {
27
            public static void main(String[] args)
28 □
29
                    Boolean[] b = new Boolean[2];
 30
                    b[0]=new Boolean(Boolean.parseBoolean("true"));
                    b[1]= new Boolean(null);
 31
                    System.out.println(b[0]+".."+b[1]);
 32
 33
            }
 34 }
35
36 What is the result?
37
38 A. true..false
39 B. true..null
40 C. Compilation Fails
◆ Untitled2 № ◆ Test.java № • wrapperclasses_wito
                                                          In 29 col 17 99 42 PC ANSI
For Help, press F1
```

S

Here

Boolean.valueof(args[0]) -> will create a Boolean Object

New Boolean (Boolean Object) -> Auto Unboxing Happens will be converted to Primitive

New Boolean(primitive true) – creates a Boolean object will be unboxed to primitive b

Line 51 null will be passed as String not as null object, either way return False and auto unboxing will result False

True .. false

```
43
44 Q. Given:
45
·46 public class Test
47 □ {
48
            public static void main(String[] args)
49 ₪
50
                    boolean a = new Boolean(Boolean.valueOf(args[0]));
51
                    boolean b = new Boolean(args[1]);
52
                    System.out.println(a+".."+b);
53
            }
54 }
55
56 And given the commands:
57 javac Test.java
58 java Test TRUE null
60 What is the result?
61
◆ Untitled2 ※ ◆ Test.java ※ ◆ wrapperclasses_wind
For Help, press F1
```

123 .. True

123 .. True

```
1 public class Test
 2 □ {
 3
       public static void main(String[] args)
 48
 5
          String s1="123";
 6
          String s2="TRUE";
          Integer i1=Integer.parseInt(s1);
 7
 8
          Boolean b1= Boolean.parseBoolean(s2);
 9
          System.out.println(i1+".."+b1);
10
11
          int i2= Integer.valueOf(s1);
12
          boolean b2=Boolean.valueOf(s2);
13
          System.out.println(i2+".."+b2);
14
       }
                    I
15 }
◆ Untitled2 35 ◆ Test.java 335 ◆ wrapperclasses_wiid5

For Help, press F1
                                                  In 15 col 2 15 00 PC ANSI
```