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| Course- BTech | Type- Core |
| Course Code- **CSET109** | Course Name- **Object Oriented Programming Using Java** |
| Year- First | Semester- Even Batch- BTech 2nd Semester |

**Tutorial-2**

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| **Tutorial No.** | **Name** | **CO1** | **CO2** | **CO3** |
| **2** | **Basics** |  | **--** | **--** |

**Objective:** The main objective of this tutorial is to learn about the basics of Java language.

**LINK - https://www.c-sharpcorner.com/article/the-complete-java-type-casting-tutorial/**

**2.1 Predict the output of the program:**

public class prg {

public static void main(String[] args) {

char a=0x41;

int b = 0x41;

System.out.print(a + "" + b);

System.out.print(","); System.out.print(a+b);

}

}

**OUTPUT –**

**A65,130**

**2.2 Compile and run the below code? Mention the reason?**

public class WrapDemo

{

public static void main(String[] args)

{

int i1=10;

System.out.println(i1);

Integer i2=new Integer(0xA);

System.out.println(i2);

if(i1==i2)

{

System.out.print("\t i1 and i2 are same");

}

else

{

System.out.print("\t i1 and i2 are not same");

}

}

}

**OUTPUT –**

**i1 and i2 are same**

**2.3 Consider the following code and guess the output.**

public class Test

{

public static void main(String args[])

{

int i=20 +9- (-12 +4)- (-13) +19;

System.out.println(i);

}

}

**OUTPUT-**

**69**

**2.4 What errors will be reported in following code blocks:**

public class Test{

public static int main(String args) {

int a=10;

String s="World";

System.out.println("Hello" + s);

System.out.println(a);

return 0;

}

}

**ERROR –**

**Error: Main method not found in class com.bu.cset109\_java.lab1(<file-name>), please define the main method as:**

**public static void main(String[] args)**

public class Test{

public static int main(String args) {

Int a=10;

string s="World";

System.out.println("Hello" + s);

system.out.println(a);

}

}

**ERROR –**

**Int, string, system**

**2.5 Which of following will work and why?**

public class Test

{

public static void main(String[] args)

{

byte grade = 128;

int marks = 50;

float price = 8.6;

double rate = 50.5;

Integer m1 = new Integer(marks);

Byte g1 = new Byte(grade); // wrapping Integer m1 = new Integer(marks);

Float f1 = new Float(price);

Double r1 = new Double(rate);

System.out.println("Values of Wrapper objects (printing as objects)");

System.out.println("Byte object g1: " + g1);

System.out.println("Integer object m1: " + m1);

System.out.println("Float object f1: " + f1);

System.out.println("Double object r1: " + r1);

}

}

**ERROR –**

**Lossy conversion (from int to byte and double to float)**

public class Test

{

public static void main(String[] args)

{

byte grade = 127;

int marks = 50;

float price = 8.6f;

double rate = 50.5;

Integer m1 = new Integer(marks);

Byte g1 = new Byte(grade); // wrapping Integer m1 = new Integer(marks);

Float f1 = new Float(price);

Double r1 = new Double(rate);

System.out.println("Values of Wrapper objects (printing as objects)");

System.out.println("Byte object g1: " + g1);

System.out.println("Integer object m1: " + m1);

System.out.println("Float object f1: " + f1);

System.out.println("Double object r1: " + r1);

}

}

**Output –**

**Values of Wrapper objects (printing as objects)**

**Byte object g1: 127**

**Integer object m1: 50**

**Float object f1: 8.6**

**Double object r1: 50.5**

NOTE –

com/bu/cset109\_java/lab1.java:[21,22] Integer(int) in java.lang.Integer has been deprecated and marked for removal

com/bu/cset109\_java/lab1.java:[22,19] Byte(byte) in java.lang.Byte has been deprecated and marked for removal

com/bu/cset109\_java/lab1.java:[23,20] Float(float) in java.lang.Float has been deprecated and marked for removal

com/bu/cset109\_java/lab1.java:[24,21] Double(double) in java.lang.Double has been deprecated and marked for removal

**2.6 Which line will give error?**

public class Test

{

public static void main(String[] args)

{

double d1 = 15f; // s1

double d2 = 25.0; // s2

float f1 = 35f; // s3

float f2 = 45.0; // s4

}

}

**ERROR –**

**S4 – lossy conversion from double to float**

**2.7 What will be output of below code?**

public class Test

{

public static void main(String[] args)

{

int b1 = 10;

int b2 = 5;

int b3 = 0;

System.out.println(b1 & b2 | b2 & b3 | b2);

System.out.println(b1 & b2 | b2 & b3 | b2 | b1 );

}

}

**OUTPUT –**

**5**

**15**

**2.8 What will be output of below code?**

public class Test

{

public static void main(String[] args)

{

Boolean b1 = false;

Boolean b2;

b2 = b1;

if (!b2)

{

b2 = true;

System.out.print("x ");

}

if (b1 | b2) /\* Line 13 \*/

{

System.out.print("y ");

}

if(b1 || !b2)

System.out.println("z");

}

}

**OUTPUT –**

**x y**

**2.9 What is output of below code?**

public class Test

{

public static void main(String[] args)

{

int x= 4;

int y= 0;

for (int z = 0; z < 5; z++)

{

if (( --x > 2 ) && (++y > 2))

{

y++;

x++;

}

}

System.out.println(x + " " + y);

}

}

**OUTPUT –**

**-1 1**

**2.10 What will be output of below code snippets:**

public class Test

{

public static void main(String[] args)

{

int x = 90;

switch(x)

{

case 90:

System.out.println("True");

case 65:

System.out.println("False"); break;

}

}

}

**OUTPUT-**

**True**

**False**

public class Test

{

public static void main(String[] args)

{

int x = 90;

switch(x)

{

case 90:

System.out.println("True"); break;

case 65:

System.out.println("False"); break;

}

}

}

**OUTPUT –**

**True**

public class Test {

public static void main(String[] args)

{

boolean chk2 = 23<4;

switch(chk2){

case true:

System.out.println("0");

case false:

System.out.println("1");

}

}

}

**ERROR –**

**selector type boolean is not allowed**