CDAC Mumbai PG-DAC August 24

Assignment No- 4

1) Write a program that demonstrates widening conversion from int to double and prints the result.

```
package in.Cdac.Assignment_4;

public class WideningIntToDouble {
    public static void main(String[] args) {
        int num = 10;
        double widenedNum = num;
        System.out.println("Widened int to double: " + widenedNum);
    }
}
```

<terminated> WideningIntToDouble [Java Application] C:\Program Files\Java Application] C:\Program Files\Java Application]

2) Create a program that demonstrates narrowing conversion from double to int and prints the result.

```
package in.Cdac.Assignment_4;

public class NarrowingDoubleToInt {
    public static void main(String[] args) {
        double num = 10.99;
        int narrowedNum = (int) num;
        System.out.println("Narrowed double to int: " + narrowedNum);
    }
}
```

<terminated> NarrowingDoubleToInt [Java Application] C:\Pi Narrowed double to int: 10

3) Write a program that performs arithmetic operations involving different data types (int, double, float) and observes how Java handles widening conversions automatically.

```
package in.Cdac.Assignment_4;

public class ArithmeticWidening {
    public static void main(String[] args) {
        int num1 = 5;
        double num2 = 6.5;
        float num3 = 3.2f;

        double result1 = num1 + num2;
        float result2 = num1 + num3;

        System.out.println("Result of int + double: " + result1);
        System.out.println("Result of int + float: " + result2);
    }
}
```

```
<terminated> ArithmeticWidening [Java Application] C:\Program File
```

```
Result of int + double: 11.5
Result of int + float: 8.2
```

4) Write a Program that demonstrates widening conversion from int to (double,float, boolean, string) and prints the result.

```
package in.Cdac.Assignment_4;

public class WideningConversions {
    public static void main(String[] args) {

        int num = 25;
        double toDouble = num;
        float toFloat = num;
        String toString = Integer.toString(num);

        boolean toBoolean = (num != 0);

        System.out.println("int to double: " + toDouble);
        System.out.println("int to float: " + toFloat);
        System.out.println("int to string: " + toString);
        System.out.println("int to boolean: " + toBoolean);
    }
}
```

<terminated> WideningConversions [Java Application] C:\Pro

int to double: 25.0

int to float: 25.0

int to string: 25

int to boolean: true