1. **Write a program that demonstrate widening conversion from int to double and print result**

Public class cast{
 Public static void main(String[] args){
 Int myint=42;
Double mydouble;
Mydouble=(double)myint;

System.out.println("int value"+myint);
System.out.println("double value"+ mydouble);
}
}

Output:
        Int value: 42
        Double value: 42.0

2.create a program that demonstrate narrowing conversion from double to int and prints result.

```java
public class DoubleToIntDemo1 {

    public static void main(String[] args) {


        double billAmt = 99.95;
        System.out.println("billAmt :"+ billAmt);

        int bill = (int) billAmt;
            System.out.println(" Your generated bill amount
is : $"+bill+". Thank You! ");

    }

}
```

Output:

billAmt: 99.95
Your generated bill amount is: $99. Thank You!

3.write a program that performs arithmetic operations involving different data types(int,float,double)

```
Public class ArithmaticDatatype{

  Public static void main(String[] args){

    int a=5, b=2;

    double c= 5.0, d, e;

    d = c+a / b

    e = a + c / b

    System.out.println(d);

    System.out.println(e);

}

}
```

Output: 7.0

          7.5

Q4.Write a Program that demonstrates widening conversion from int to (double,float, boolean, string) and prints the result.

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

int intValue = 10; // Widening conversion to double double doubleValue = intValue; System.out.println("Widening int to double: " + doubleValue); // Widening conversion to float float floatValue = intValue;

```java
System.out.println("Widening int to float: " + floatValue);
boolean boolValue = intValue > 0; System.out.println("Widening int to boolean: " + boolValue);
String stringValue = String.valueOf(intValue); System.out.println("Widening int to String: " + stringValue); } }
```