1. Write a program to demonstrate use of type casting in java. print result after type casting.

**package** lab4;

**public** **class** Typecasting {

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

// Implicit Casting (Widening)

**int** num = 10;

**double** doubleNum = num; // int to double

System.***out***.println("Implicit Casting (int to double): " + doubleNum);

// Explicit Casting (Narrowing)

**double** decimal = 15.75;

**int** intNum = (**int**) decimal; // double to int

System.***out***.println("Explicit Casting (double to int): " + intNum);

// char to int

**char** letter = 'A';

**int** asciiValue = letter; // char to int

System.***out***.println("Char to int " + asciiValue);

}

}

1. Write a program to demonstrate use of local, instance and static variables in java.

**package** lab4;

**public** **class** VariableEx {

// Instance Variable

**int** instanceVar = 10;

// Static Variable

**static** **int** *staticVar* = 20;

**public** **void** showInstanceVar() {

// Local Variable

**int** localVar = 30;

System.***out***.println("Local Variable: " + localVar);

System.***out***.println("Instance Variable: " + instanceVar);

}

**public** **static** **void** showStaticVar() {

// Local Variable

**int** localVar = 40;

System.***out***.println("Local Variable: " + localVar);

System.***out***.println("Static Variable: " + *staticVar*);

}

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

VariableEx demo = **new** VariableEx();

demo.showInstanceVar(); // Access instance variable

*showStaticVar*(); // Access static variable

}

}