Explicit & Implicit Casting

**Implicit type casting** is performed by the compiler on its own when it encounters a mixed data type expression in the program. it is also known as automatic conversion as it is done by compiler without programmer’s assistance. implicit casting doesn’t require a casting operator.

we can directly use implicit conversion if the value that needs to be stored in another variable can fit directly without data loss. Let’s say we have an “integer” value and we want to pass that value to a “float”.

**Example :-**

1. int a=42;
2. float b=a;

here **b** will contain typecast value of **a**, because while assigning value to **b** compiler typecasts the value of **a** into float then assigns it to **b**.

**Explicit type casting** is performed by the programmer. In this type casting programmer tells compiler to type cast one data type to another data type using type casting operator. but there is some risk of information loss is there, so one needs to be careful while doing it.

if we are converting a higher numeric value into a lower one.

**Example :-**

1. float a=42.12;
2. int b=(int)a;

here we explicitly converted float value of **a** to int while assigning it to int **b**. **(int)**is the type casting operator with the type in which you wants to convert.

**Conclusion**

Implicit conversion is the conversion in which a derived class is converted into a base class like int into a float type.

Explicit conversion is the conversion that may cause data loss. Explicit conversion converts the base class into the derived class. We may need to perform the conversion on different other data types, to do that we take the help of the helper class. Helper class like “Parse” and “ConvertTo” offers various ways to convert one data type into another.