Formula

100 cm = 1 meter

1 m = 100 cm

1000 m = 1 kilometer

5 cm = m?

m = cm/100

Km =m/1000

Km = cm/100000

**Type conversion/widening conversion / implicit conversion**: When we convert one data type to another data type. It is automated

It possible when:

1. Type compatible ex: int to float or float to int it is possible. int to boolean or boolean to int it is not possible
2. Destination type > source type ex: int a=7; long b = a; it is possible
3. Byte -> short -> int -> float -> long -> double

**Type casting/ narrowing conversion / explicit conversion:** Javadoesn’t allow this type of conversion. We convert it forcefully. It is manual

Ex:

float a = 25.12f;

int b = (int) a;

# Type promotion in Expressions

1. Java automatically promotes each byte, short, or char operand to int when evaluating an expression.
2. If one operand is long, float, or double the whole expression is promoted to long, float, or double respectively.

Ex:

int a;

float b;

char c;

long e;

a+b\*c/e

Note: it convert into Largest possible data type so, it convert into long