operand whose type has lesser integer conversion rank to the type of the operand with greater rank.

- If the unsigned operand has rank greater or equal to the rank of the type of the signed operand, convert the signed operand to the type of the unsigned operand.
- If the type of the signed operand can represent all of the values of the type of the unsigned operand, convert the unsigned operand to the type of the signed operand.
- Otherwise, convert both operands to the unsigned type corresponding to the type of the signed operand.

Incidentally, all arithmetic types can be converted to `_Bool` type. The result of the conversion is 0 if the original value is 0; otherwise, the result is 1.

Casting

Although C's implicit conversions are convenient, we sometimes need a greater degree of control over type conversion. For this reason, C provides *casts*. A cast expression has the form

cast expression

(*type-name*) *expression*

type-name specifies the type to which the expression should be converted.

The following example shows how to use a cast expression to compute the fractional part of a `float` value:

```
float f, frac_part;

frac_part = f - (int) f;
```

The cast expression `(int) f` represents the result of converting the value of `f` to type `int`. C's usual arithmetic conversions then require that `(int) f` be converted back to type `float` before the subtraction can be performed. The difference between `f` and `(int) f` is the fractional part of `f`, which was dropped during the cast.

Cast expressions enable us to document type conversions that would take place anyway:

```
i = (int) f;    /* f is converted to int */
```

They also enable us to overrule the compiler and force it to do conversions that we want. Consider the following example:

```
float quotient;
int dividend, divisor;

quotient = dividend / divisor;
```