

Initializing declaration

Form of initializing declaration, a combination of a declaration and an assignment of a value to it.

`<type> <variable>= <expression>;`

Equivalent to

`<type> <variable>;
<variable>= <expression>'`

Instead of

```
int c;  
c= 25;
```

write

```
int c= 25;
```

Variable and expression types must match

<variable>= <expression>;

e.g. both **boolean**, or both String

byte $-2^7 \dots 2^7 -1$ 8 bits -128 .. 127 **narrower**

short $-2^{15} \dots 2^{15} -1$ 16 bits

int $-2^{31} \dots 2^{31} -1$ 32 bits

long $-2^{63} \dots 2^{63} -1$ 64 bits

float 32-bit real numbers

double 64-bit real numbers



wider

<variable>= <expression>;

numeric type

same or narrower type

Assigning a wider-type value to a narrower-type variable may lose information.

How can 6000 be stored in a byte variable?