Type Conversion

```
int a;
a = 1.7;
printf("%d", a);
```
①

```
a = b;
```

```
float a;
a = 8;
printf("%f", a);
```
8.000000

Type Casting Vs Type Conversion

Type Casting	Type Conversion
① Explicit	① Implicit
② Temporary	② Permanent
③ With/without assignment op	③ W.r.t. assignment op

① int a;

a = 10/4;

No TC

② int a;

a = 10/4.0;

TC is done

③ float a;

a = 10/4.;

TC is done

④ float a;

a = 10/4.0;

TC is done

Different Types of Constants

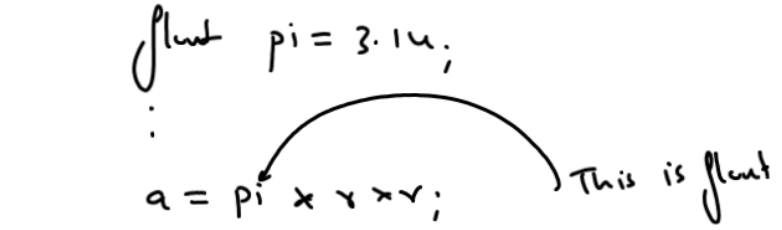
25 ——> int const ——> 2 B

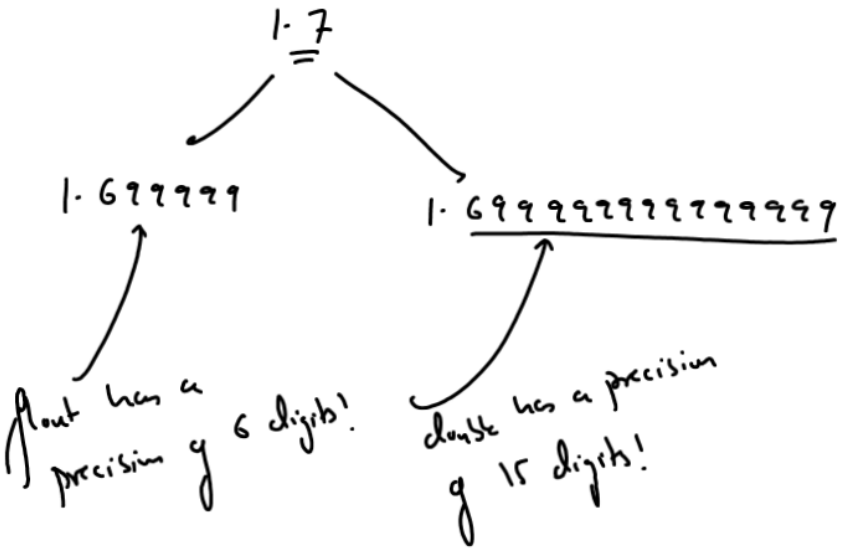
'A' ——> char const ——> 1 B

1.6 ——> double const ——> 8 B

1.6f or 1.6F ——> float const ——> 4 B


ar = 3.14 * r * r;
This is double constant!

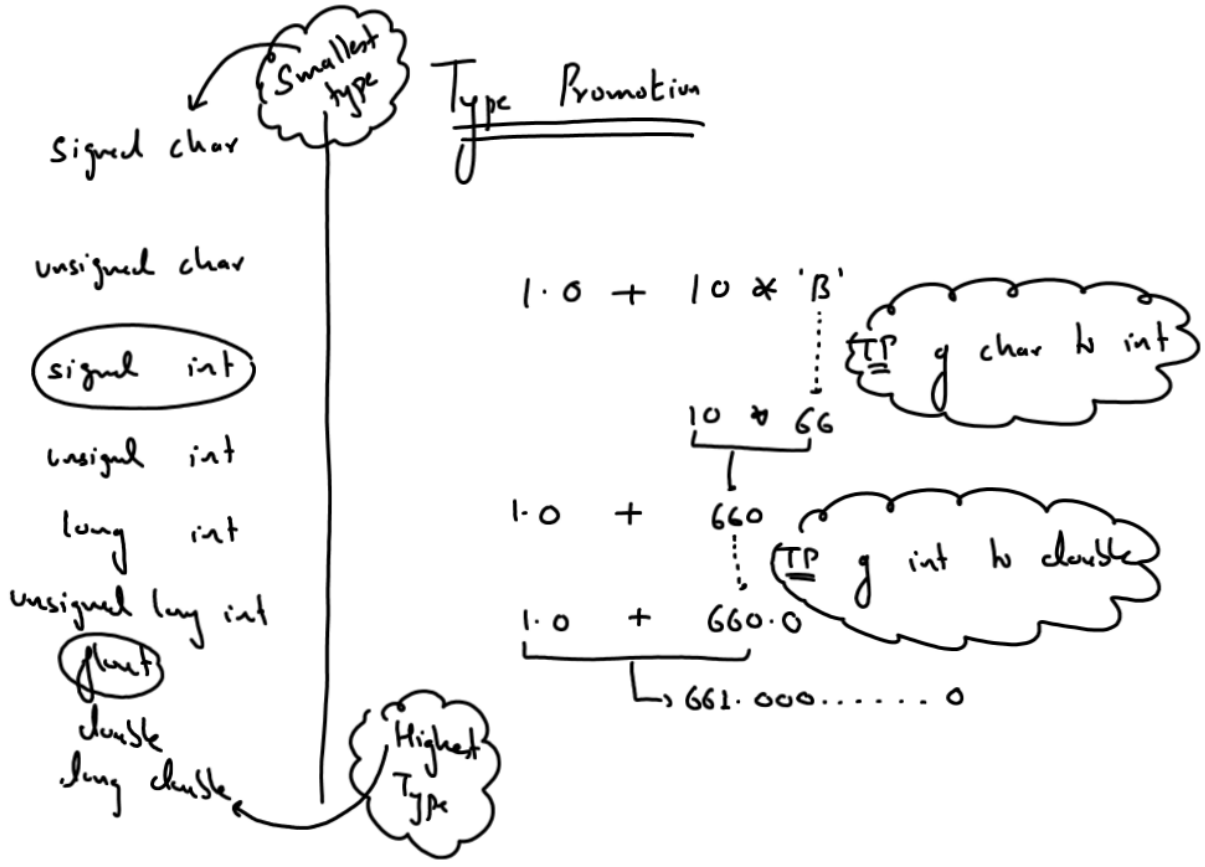

float pi = 3.14;
a = pi * r * r;
This is float

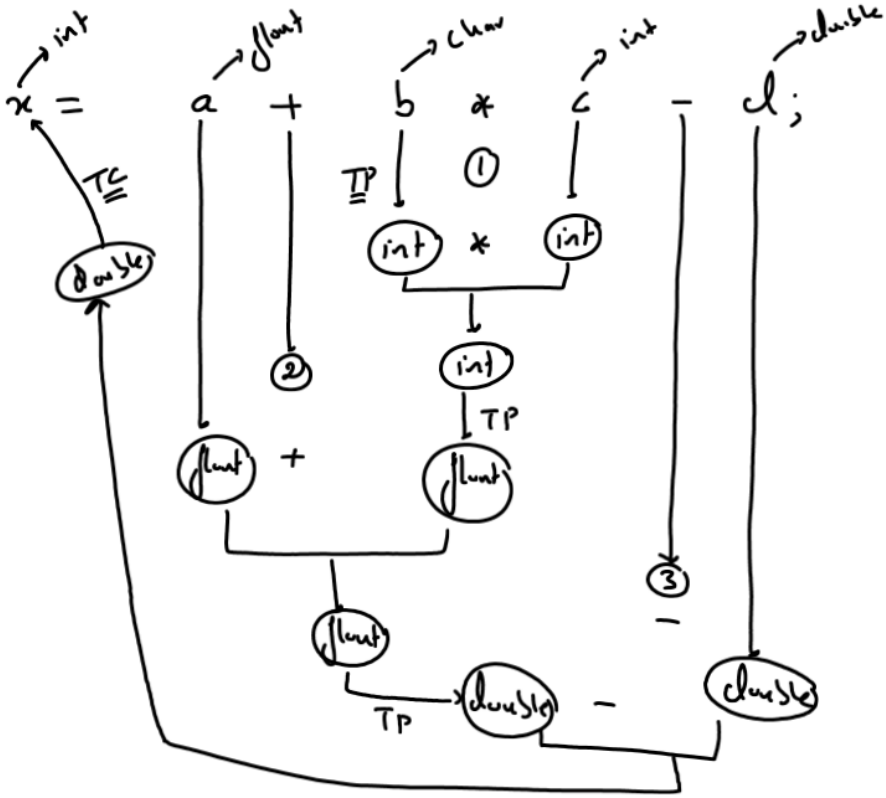

1.7
1.699999
1.6999999999999999
float has a precision of 6 digits!
double has a precision of 15 digits!

① float a;
a = 1.7; Tc is done

② double a;
a = 1.7; Tc is not done

③ float a;
a = 1.7f; Tc is not done




x
int
=
a
float
+
b
char
*
c
int
-
d
double
;
TC
TP
1
2
3
int
int
int
TP
float
+
float
float
TP
double
-
double
double