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Data Types. (Primitive Data Types)

int

char

float

bool

double

int 4 byte `int age = 25;`

0 / 1 → Binary

int = 4 bytes

1 ← Bit

1 bytes = 8 bit

8 bit = 1 bytes

0 1 0 1 1 0 1 0 × 4 bytes = 32 bits

char 1 byte `char grade = 'A';`

↓

ASCII value

a, b, c - - -

97, 98, 99 - - -

float 4 byte `float pi = 3.14F;`

bool 1 byte boolean

true (1) false (0)

`bool isSafe = true; // 1`

double 8 bytes

double price = 100.92;

Type Casting

Converting data from one type to another data type is called as Type Casting.

Type Casting

- Conversion [implicit]
  - Compiler does
  - Small → big
  - Ex. float 3.14 → double
  - 4 bytes → 8 bytes
  - No data loss

- Casting [explicit]
  - users do → forcefully

```
int main() {
double price = 100.99;
int newPrice = (int)price;
cout << newPrice;
return 0;
}
```

Char → int.

Ex.
```
int main() {
char grade = 'A';
int val = grade;
cout << val;
return 0;
}
```

op = 65

(A=65)

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Taking Input in C++ ;

```
int main() {
    int age;
    cout << " Enter your Age : " ;
    cin>> age ;

    cout << " your age is : " << age;
    return 0;
}
```

Operators in C++

- Arithmetic
- Relational
- Logical
- Unary operators