

# Floating Point Fixed and Scientific

## Fixed and Scientific

In Fixed floating point no power (or e) uses. Ex - 10.5, 122.5.

In Scientific floating point we will use e. Ex - 1.2e + 04, 1.45e +06.

- In both precision means digits after the decimal point.
- If there are not enough digits then the trailing zeros are shown in both.
- We can set back to default using "default float."

```
#include<iostream>#include<iomanip>using namespace std;
int main()
{
    double x = 1.23, y = 1122456.453;
    cout << std::fixed;
    cout << x << "\n"
         << y << "\n";
    cout << std::setprecision(2);
    cout << x << "\n"
         << y << "\n";
    double z = 1.2e+7;
    cout << z;
    return 0;
}
```

## Output

```
1.230000
1122456.453000
1.23
1122456.45
12000000.00
```