

04-07-2024

~~Streams~~

## INSERTION OPERATOR OVERLOADING :-

→ using namespace std;

```
#include <iostream>
```

```
class abc
```

```
{
```

```
public: int x;
```

```
abc(int x)
```

```
{
```

```
    this->x = x;
```

```
}
```

```
friend ostream & operator << (ostream &, int &);
```

```
};
```

```
ostream & operator << (ostream & out, abc & p)
```

```
{
```

```
    out << p.x;
```

```
    out << "overloaded function called";
```

```
    return out;
```

```
}
```

```
main()
```

```
{
```

```
    abc p(5); cout << p << p << p;
```

```
}
```

o/p:- ~~prints~~

2 4 5

overloaded function called

5

overloaded function called

5

overloaded function called



## FORMATING IN C++ / MANIPULATORS IN 10S FUNCTIONS:-

→ using namespace std;

MANIPULATORS

#include <iostream>

#include <iomanip>

main()

{

int a=5;

cout << a << endl;

cout << setfill('\*');

cout << setw(5);

set width → setw

cout << a << endl;

cout << a << endl;

o/p:-

float b=2.5288475;

cout << b << endl;

cout << setprecision(2);

cout << b << endl;

}

O/p:-

2

5

\* \* \* \* \*

5

2.52885

2.5



Set w

fill

precision

## ios function :-

```
→ Using namespace std;
#include <iostream>
#include <iomanip>

main ( )
{
    int a = 5;
    cout << a << endl;
    cout << fill ( ' * ' );
    cout << width ( 5 );
    cout << a << endl;
    cout << a << endl;
    float b = 5.2678;
    cout << b << endl;
    cout << precision ( 2 );
    cout << b << endl;
}
```

O/p :-

```
5
2  * * * * 5
5
5.2678
5.3
```



→ using namespace std;

# include <iostream>

# include <iomanip>

main ( )

{

int a = 45;

// cout.setf (ios::hex, ios::basefield);

cout.setf (ios::showpos);

cout << a;

cout.setf (ios::showbase);

cout.setf (ios::hex, ios::basefield);

cout << a;

}

## MANIPULATOR

→ setw ( )

→ setfill ( )

→ setprecision ( )

→ setiosflags (arg 1)

→ endl

→ skipws = skip whitespace

## EQUIVALENT IOS FUNCTION

width ( )

fill ( )

precision ( )

setf (arg 1, arg 2)