

OPERATOR OVERLOADING

You can use the 'operator' keyword to overload normal C operators to perform basic functions like adding and subtracting the way you would normally, by using the '+' and '-' symbols. Thus, instead of creating a function to do something like this:

```
Vector = myAddTwoVectors( Vector1, Vector2 );
```

you would overload the '+' operator so that the above statement would look like this:

```
Vector = Vector1 + Vector2;
```

The mechanics for operator overloading are shown in the following code segment:

```
// vector.cp
#include <iostream.h>

class Vector
{
    float x;
    float y;
public:
    Vector( int a, int b );
    Vector &operator+( Vector &V );
    void print( void );
};

Vector::Vector( int a, int b )
{
    x = a;
    y = b;
}

Vector &Vector::operator+( Vector &V )
{
    Vector resultV( 0, 0 );

    resultV.x = x + V.x;
    resultV.y = y + V.y;

    return resultV;
}

void Vector::print( void )
{
    cout << "x: " << x << endl;
    cout << "y: " << y << endl;
}

void main( void )
{
    Vector vectorA( 3, 4 );
    Vector vectorB( 2, 7 );
    Vector vectorResult( 0, 0 );

    vectorResult = vectorA + vectorB;
    vectorResult.print();
}

// end vector.cp
```