Assignment : 10

Q1)

Ans.

```
#include <iostream>
using namespace std;
class MyInteger {
private:
	int value;

public:
	MyInteger(int val) {
	value = val;
}
	MyInteger operator-() {
	return MyInteger(-value);
	}
	void operator ++ () {
	++value;
	}

	void operator ++ (int) {
	value++;
	}

	void operator -- () {
	--value;
	}

	void operator -- (int) {
	value--;
	}

	int getValue() {
	return value;
	}
};

int main() {
	MyInteger num(5);

	MyInteger negative = -num;
	cout << "Unary minus: " << negative.getValue() << endl;

	++num;
```

```
        cout << "Pre -increment: " << num.getValue() <<endl;

        num++;
        cout << "Post-increment: " << num.getValue() <<endl;

        --num;
        cout << "Post-decrement: " << num.getValue() <<endl;

        num--;
        cout << "Post-decrement: " << num.getValue() <<endl;

        return 0;
}
```

Output :

Q2)
Ans.

```
#include <iostream>
using namespace std;

class Complex {
  private:
        float real;
        float imag;

  public:
        Complex() : real(0), imag(0) {}

        void input() {
```

```
        cout << "Enter real and imaginary parts respectively: ";
        cin >> real;
        cin >> imag;
        }
        Complex operator + (const Complex& obj) {
        Complex temp;
        temp.real = real + obj.real;
        temp.imag = imag + obj.imag;
        return temp;
        }
        Complex operator - (const Complex& obj) {
        Complex temp;
        temp.real = real - obj.real;
        temp.imag = imag - obj.imag;
        return temp;
        }

        void output() {
        if (imag < 0)
        cout << "Output Complex number: " << real << imag << "i"<< endl;
        else
        cout << "Output Complex number: " << real << "+" << imag << "i"<< endl;
        }
        void outputt() {
        if (imag < 0)
        cout << "Output Complex number: " << real << imag << "i"<< endl;
        else
        cout << "Output Complex number: " << real << "+" << imag << "i"<< endl;
        }
};

int main() {
        Complex complex1, complex2, result,r;

        cout << "Enter first complex number:\n";
        complex1.input();

        cout << "Enter second complex number:\n";
        complex2.input();

        result = complex1 + complex2;
        result.output();

        r = complex1 - complex2;
```

```
        r.outputt();

        return 0;
}
```

Output :

Output

```
/tmp/loMy8oqmDr.o
Enter first complex number:
Enter real and imaginary parts respectively: 1 5
Enter second complex number:
Enter real and imaginary parts respectively: 4 7
Output Complex number: 5+12i
Output Complex number: -3-2i
```