**Lab#6**

**Objective:** To illustrate This pointer function with OOP.

**This Pointer**:  Every object in C++ has access to its own address through an important pointer called **this** pointer. The  **this** pointer is an implicit parameter to all member functions. Therefore, inside a member function, this may be used to refer to the invoking object.

**Lab Tasks:**

* Write code, compile and run.
* Write output of code in below given box.
* Write another code (program) that demonstrates concept of this operator.
* Write the output of 2nd program.

**Program 1 (Code):**

#include <iostream>

using namespace std;

class Box {

public:

// Constructor definition

Box(double l = 2.0, double b = 2.0, double h = 2.0) {

cout<<"Constructor called." <<endl;

length = l;

breadth = b;

height = h;

}

double Volume() {

return length \* breadth \* height;

}

int compare(Box box) {

return this->Volume() >box.Volume();

}

private:

double length; // Length of a box

double breadth; // Breadth of a box

double height; // Height of a box

};

int main(void) {

Box Box1(3.3, 1.2, 1.5); // Declare box1

Box Box2(8.5, 6.0, 2.0); // Declare box2

if(Box1.compare(Box2)) {

cout<< "Box2 is smaller than Box1" <<endl;

} else {

cout<< "Box2 is equal to or larger than Box1" <<endl;

}

return 0;}

**OUTPUT:**

