Box It!

Design a class named *Box* whose dimensions are integers and private to the class. The dimensions are labelled: length l, breadth b, and height h.

The default constructor of the class should initialize l, b, and h to 0.

The parameterized constructor *Box(int length, int breadth, int height)* should initialize *Box*'s l, b and h to length, breadth and height.

The copy constructor *Box*(*Box* B) should set l, b and h to B's l, b and h, respectively.

Apart from the above, the class should have 4 functions:

- *int getLength()* - Return box's length
- *int getBreadth()* - Return box's breadth
- *int getHeight()* - Return box's height
- *long long CalculateVolume()* - Return the volume of the box

Overload the operator $<$ for the class *Box*. *Box* $A <$ *Box* B if:

1. $A.l < B.l$
2. $A.b < B.b$ and $A.l == B.l$
3. $A.h < B.h$ and $A.b == B.b$ and $A.l == B.l$

Overload operator $<<$ for the class *Box()*.
If B is an object of class *Box*:

$cout << B$ should print $B.l$, $B.b$ and $B.h$ on a single line separated by spaces.

Constraints

$0 \leq l, b, h \leq 10^5$
Two boxes being compared using the $<$ operator will not have all three dimensions equal.