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

class HardDisk {
	int rpm, capacityInGB;

public:
	HardDisk& setHardDiskInfo() {
		cout << "Enter rpm= "; cin >> rpm;
		cout << "Enter capacity= "; cin >> capacityInGB;
cin.ignore();

		return *this;
	}

	HardDisk& showHardDiskInfo() {
		cout << "Rpm= " << rpm << endl;
		cout << "Capacity in giga byte= " << capacityInGB <<
endl;;

		return *this;
	}
	friend void operator+=(int&, ComputerLab&);
};

class Computer {
	string brand;
	float speedInGhz, price;
	int noOfHDD;

	HardDisk* hddArr;

public:
	Computer& setComputerInfo() {
		cout << "Enter brand= "; getline(cin, brand);
		cout << "Enter speed= "; cin >> speedInGhz;
		cout << "Enter price= "; cin >> price;
		cout << "Enter number of HDD= "; cin >> noOfHDD;

		hddArr = new HardDisk[noOfHDD];
		for (int i = 0; i < noOfHDD; i++) {
			cout << "For HDD " << i + 1 << ": " << endl;
			hddArr[i].setHardDiskInfo();
		}

		return *this;
	}

	Computer& showComputerInfo() {
		cout << "Brand= " << brand << endl;
		cout << "Speed in giga hertz= " << speedInGhz << endl;
		cout << "Price= " << price << endl;
		cout << "Number of HDD= " << noOfHDD << endl;

		for (int i = 0; i < noOfHDD; i++) {
```

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                        hddArr[i].showHardDiskInfo();
                }

                return *this;
        }

        friend void operator+=(int&, ComputerLab&);
};

class ComputerLab {
        string roomNo;
        int noOfComputer;

        Computer* compArr;

public:
        ComputerLab& setLabInfo() {
                cout << "Enter room number= "; getline(cin, roomNo);
                cout << "Enter number of computers= "; cin >>
noOfComputer; cin.ignore();

                compArr = new Computer[noOfComputer];
                for (int i = 0; i < noOfComputer; i++) {
                        cout << "For computer " << i + 1 << ": " <<
endl;
                        compArr[i].setComputerInfo();
                }

                return *this;
        }

        ComputerLab& showLabInfo() {
                cout << "Room number= " << roomNo << endl;
                cout << "Number of computers= " << noOfComputer <<
endl;

                for (int i = 0; i < noOfComputer; i++) {
                        compArr[i].showComputerInfo();
                }

                return *this;
        }

        friend void operator+=(int&, ComputerLab&);
};

void operator+=(int& x, ComputerLab& c) {
        for (int i = 0; i < c.noOfComputer; i++) {
                for (int j = 0; j < c.compArr[i].noOfHDD; j++) {
                        x = x + c.compArr[i].hddArr[j].capacityInGB;
                }
        }
}

bool operator>=(int& y, ComputerLab& c) {

}
```

```
int main() {
	ComputerLab* labs;
	int n, i;
	cout << "How many computer labs?" << endl;
	cin >> n; cin.ignore();
	labs = new ComputerLab[n];

	int totalStorageOfAllLabsInGB = 0;
	for (int i = 0; i < n; i++) {
		cout << "For lab " << i + 1 << ": " << endl;
		labs[i].setLabInfo().showLabInfo();

		totalStorageOfAllLabsInGB += labs[i];

		if (labs[i] >= 30) {
			cout << i << "-th lab is a small computer
lab." << endl;
		}
	}

	cout << "Total storage of all labs combined is: " <<
totalStorageOfAllLabsInGB << " GB" << endl;

	return 0;
}
```