Demand topics by students – B2 batch

1. **Pointers to objects** [usage of -> (arrow) operator]

Let's Code:

```
#include<iostream>
using namespace std;
class A
{
        private:
                int a, b;
        public:
                void add(int x, int y)
                {
                        a=x;
                        b=y;
                }
                void disp()
                {
                cout<<"Pointer to object is done"<<endl;
                cout<<"Addition is "<<a+b<<endl;
                }
};
int main()
{
        A obj1;
        /* obj1.add(5,4);
        obj1.disp();  */

        A *ptr1;
        ptr1=&obj1;
        ptr1->add(4,5);
        ptr1->disp();

}
```

Output:

```
Pointer to object is done
Addition is 9
```

2. this pointer

In **C++** programming, this is a **keyword** that refers to the current instance of the class. There can be 3 main usage of this **keyword** in C++.

...

C++ this Pointer

- It can be used to pass current object as a parameter to another method.
- It can be used to refer current class instance variable.
- It can be used to declare indexers.

Usage 01:

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

class test
{
        int a, b;
        public:
        void disp()
        {
                a=10;
                b=20;
        cout<<"Current object address"<<this<<endl;
        cout<<"a value is "<<this->a<<endl;
        cout<<"b value is "<<this->b<<endl;
        }
};

int main()
{

test obj;
obj.disp();

return 0;

}
```

Output:

```
Current object address0x7ffee3cfabf0
a value is 10
b value is 20
```

Usage 2:

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

class test
{
        public:
        int a, b;
        public:
        void disp(int a, int b)
        {
                this->a=a;   // a=a;  // (*this).a=a;
                this->b=b;   // b=b;  // (*this).b=b;

        cout<<"a value is "<<this->a<<endl;
        cout<<"b value is "<<this->b<<endl;
        }
};

int main()
{

test obj;
obj.disp(10,20);

return 0;
}
```

Output:

```
a value is 10
b value is 20
```