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## Inheritance

Inheritance is a feature to reuse the existing class without making any changes in it.

Syntax: InheritingClass : InheritedClass

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

class Papa {
public :
    int a = 10;
};

class Beta : public Papa {
public :
    int b = 20;
};

int main() {
    Beta obj;
```

```
cout << obj.a + obj.b<< endl;  
}
```

In above program, Beta class inherited Papa class.

## 2. Encapsulation

Encapsulation is defined as binding together the data and the functions that manipulates them.



```
class Encapsulation {  
    private:  
        int a;  
  
    public:  
        void show() {  
            cout<<a;  
        }  
}
```

```
};
```

In above program,

class Encapsulation binds together variable a and function show().

### 3. Abstraction

Abstraction refers to providing only essential information to the outside world and hiding their background details.

For example,

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

int main() {
    cout << "Abstraction";
    return 0;
}
```

In above program,

User dont need to understand how cout works. User should know only how to use it.