

c++ only

class and constructor

```
class Rectangle {
```

```
private;
```

```
    int length;
```

```
    int breadth;
```

```
public:    → constructor
```

```
    Rectangle(int l, int b) {
```

```
        length = l;
```

```
        breadth = b;
```

```
    }
```

```
    int area() {
```

```
        return length * breadth; ←
```

```
    }
```

```
    int changeLength(int l) { ←
```

```
        length = l;
```

```
};
```

```
int main() {
```

```
    Rectangle r(10, 5);
```

```
    r.area();
```

```
    r.changeLength(20);
```

```
}
```

r	
10	20
5	

initialize.

area()

change length.

class and constructor

```
#include <iostream>
```

```
using namespace std;
```

```
class Rectangle {
```

```
private:
```

```
    int length;
```

```
    int breadth;
```

```
public:
```

```
    Rectangle() { length = breadth = 1; }
```

→ default constructor.

```
    Rectangle(int l, int b) { length = l; breadth = b; }
```

→ parameterized constructor

→ constructor overloading

facilitator {

```
        int area();
```

```
        int perimeter();
```

accessor {

```
        int getLength() { return length; }
```

mutator {

```
        void setLength(int l) { length = l; }
```

```
        ~Rectangle(); → destructor
```

```
};
```

```
Rectangle::Rectangle(int l, int b) {
```

```
    length = l;
```

```
    breadth = b;
```

```
}
```

```
int Rectangle::area() {
```

```
    return length * breadth;
```

```
}
```

```
int Rectangle::Perimeter() {  
    return 2 * (length + breadth);  
}
```

```
Rectangle::~Rectangle() {}
```

```
int main() {  
    Rectangle r(10, 5);  
    cout << r.area();  
    cout << r.perimeter();  
    r.setLength(20);  
    cout << r.getLength();  
}
```