

Course code: CSC-284 Lab Report: 05

Submitted To

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Submitted By

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Section: A

Semester: Fall 2024

Submission date: 15/12/2024 Teacher signature

1. Copy Constructor:

```
# 23303097.cpp - Code::Blocks 20.03
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
- | d 0 |⇒
               ₩ 1/** *< 0 2 3
Management × Start here × 23303097.cpp ×
Projects Files
                             #include <iostream>
using namespace std;

    ₩orkspace

                         4 □class Rectangle {
                                private:
    int width, height;
                                public:
                                    Rectangle(int w = 5, int h = 10) {
                                      width = w;
height = h;
                                   void displayArea() {
   cout << "Area of rectangle: " << width * height << endl;
}</pre>
                        11
                       13
14
15
16
17
                                                                    ■ D:\23303097.exe
                            | Eint main() {
    cout<<"Md: Ikbal Hossain"<<endl;
    Rectangle rectl;
    rectl.displayArea();</pre>
Area of rectangle: 96
                        18
19
                                 Rectangle rect2(8, 12);
rect2.displayArea();
                        20
                                                                    Process returned 0 (0x0) \, execution time : 0.087 s Press any key to continue.
                        22
23
                                  return 0;
                    <

✓ Code::Blocks × 

Search results × 

Cccc × 

Build
                              L... Message
=== Build file: "no target" in "no pro
D:\23303097.cpp
```

2. Parameterized Constructor:

```
5 23303097.cpp - Code::Blocks 20.03
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
₩ $ /** *< 0 2 3
Management × Start here × 23303097.cpp ×
Projects Files
                      1 #include <iostream>
2 using namespace std;

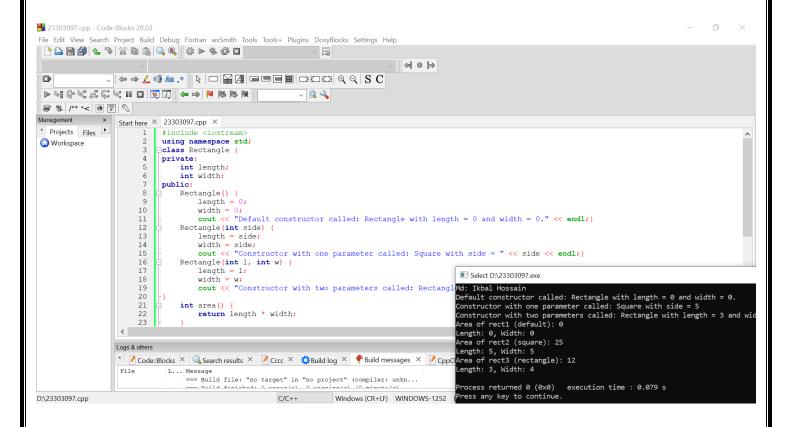
    ₩orkspace

                      private:
int length;
                     8
9
10
                              Rectangle(int 1, int w) {
                     11
12
                                length = 1;
width = w;
                     13
14
                            int getArea() {
                                                                                 D:\23303097 exe
                     15
16
17
18
                                  return length * width;
                                                                               Md. Ikbal Hossain
Length: 10, Width: 5
                             void displayDimensions() {
   cout << "Length: " << length << ", Width: " <Area: 50</pre>
                     19
20
                                                                               Process returned 0 (0x0) execution time : 0.122 s
Press any key to continue.
                         int main() {
    cout<<"Md. Ikbal Hossain"<<endl;
    Rectangle rect(10, 5);</pre>
                      21
                      23

    Code::Blocks 
    Search results 
    Cccc 
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                            L... Message
                                === Build file: "no target" in "no project" (compiler: un)
D:\23303097.cpp
                                                    C/C++ Windows (CR+LF) W
```

3. Multiple Constructor:



4. Dynamic Constructor: File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help Management × Start here × 23303097.cpp × Projects Files #include <iostream> using namespace std; |class Box { private: int length; public: Box(int len) : length(len) {} Box(const Box &b) { length = b.length; cout << "Copy constructor called!" << endl;</pre> 10 11 int getLength() const { 13 14 return length; 15 16 17 18 19 int main() { cout<<"Md: Ikbal Hossain"<<endl; Box box1(10); Box box2 = box1; cout << "Length of box1: " << box1.getLength() << endl; cout << "Length of box2: " << box2.getLength() << endl; return 0;</pre> | D\23303097.exe | Copy constructor called! | Length of box1: 10 | Length of box1: 10 | Length of box2: 10 20 21 Process returned 0 (0x0) execution time : 0.088 s Press any key to continue. Code::Blocks Search results Cccc Build log Puild messages Search results Incomplete Code::Blocks Search results Incomplete Code::Blocks Results Results Results Results Results Results Code::Blocks Results L... Message === Build file: "no target" in "no project" (compiler: unkn... D:\23303097.cpp C/C++ Windows (CR+LF) WINDOWS-