Total Time: 10 Minutes
Total Marks: 10
Important Note: Negative marks will be awarded for any suspicious activity found during/in the quiz.

Question: Write the output/Errors for the program given below

```cpp
#include<iostream>

using namespace std;


class Rectangle

{

private:

    int* lenght;

    int* width;

public:

    Rectangle(int l = 0, int w = 0);

    Rectangle(const Rectangle&);

    ~Rectangle();

    void Print();

    const Rectangle & operator=(const Rectangle&);


    Rectangle GetRotatedRect()

    {

        cout << "------------------" << endl;

        Rectangle temp;

        *temp.lenght = *width;

        *temp.width = *lenght;

        cout << "################" << endl;
```

```cpp
Rectangle::~Rectangle()

{

    cout << "Destructor Called for rectangle " << *lenght << " X " << *width << "\n\n";

    delete lenght;

    delete width;

}

const Rectangle&
Rectangle::operator=(const Rectangle& rhs)

{

    cout << "Overloaded Assignment Operator Called for LHS " << *rhs.lenght << " X " << *rhs.width << endl;


    if (&rhs != this)

    {

        *lenght = *rhs.lenght;

        *width = *rhs.width;

    }

    return *this;

}


void Rectangle::Print()
```

```cpp
        return temp;
    }
};


Rectangle::Rectangle(int l, int w)
{
    cout << "Constructor Called for "
<< l << " X " << w << ".\n\n";

    lenght = new int(l);

    width = new int(w);

}


Rectangle::Rectangle(const Rectangle&
rhs)
{
    cout << "Copy Constructor Called
to create a copy of Rectangle " <<
*rhs.lenght << " X " << *rhs.width <<
endl;

    lenght = new int(*rhs.lenght);

    width = new int(*rhs.width);

}
```

```cpp
{
    cout << *lenght << " X " << *width
<< endl << endl;

}



void main()

{

    Rectangle r1(2, 3);

    Rectangle r2;


    r2 = r1.GetRotatedRect();

    cout << "r2:\t";

    r2.Print();

}
```

Output/Errors: