**ASSIGNMENT4**

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CLASS SY-MCA

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#include<iostream>

using namespace std;

class TestScores

{

    public:

    int \*scores,l;

    TestScores()

    {

        int i;

        cout<<"Enter How Many Test Scores You Want:";

        cin>>l;

        scores=new int[l];

        cout<<"\nEnter "<<l<<" TestScores:-\n";

        for(i=0;i<l;i++)

        {

            cout<<"Enter "<<i+1<<" Test Score:-";

            cin>>scores[i];

        }

    }

    TestScores(TestScores &t2)

    {

        int i;

        l=t2.l;

        scores=new int[l];

        for(i=0;i<l;i++)

        {

            scores[i]=t2.scores[i];

        }

    }

    void show()

    {

        int i;

        cout<<"\n---:Test Scores:---";

        for(i=0;i<l;i++)

        {

            cout<<endl<<scores[i];

        }

    }

    void average()

    {

        float avg=0;

        int i;

        for(i=0;i<l;i++)

        {

            avg=avg+scores[i];

        }

        avg=avg/l;

        cout<<"\n Average:-"<<avg<<"\n";

    }

    void operator [](int i)

    {

        if(i>=l || i<0)

        {

            cout<<"\n---:Array Index Out OF Bound:---\n";

        }

        else

        {

            cout<<"Enter New Value for "<<i<<" Element::";

            cin>>scores[i];

        }

    }

    TestScores operator = (TestScores &t)

    {

        int i;

        l=t.l;

        cout<<"\n---:Overloading =  operator:---\n";

        scores=new int[l];

        for(i=0;i<l;i++)

        {

            scores[i]=t.scores[i];

        }

    }

    ~TestScores()

    {

        delete [] scores;

    }

};

int main()

{

    TestScores t1;

    cout<<"\n---:Object 1:---\n";

    t1.show();

    t1.average();

    cout<<"\n---:Object 2:---\n";

    TestScores t2(t1);

    cout<<"After using copy constructor object2:-\n";

    t2.show();

    t2.average();

    cout<<"\nChanging Values Of t2 by Overloading [] Operator:-\n";

    t2[0];

    t2[1];

    t2[10];

    cout<<"\nAfter Changing values Object 2 :-\n";

    t2.show();

    t2.average();

    t2=t1;

    cout<<"\nAfter Using Asignment Operator Object 2:\n";

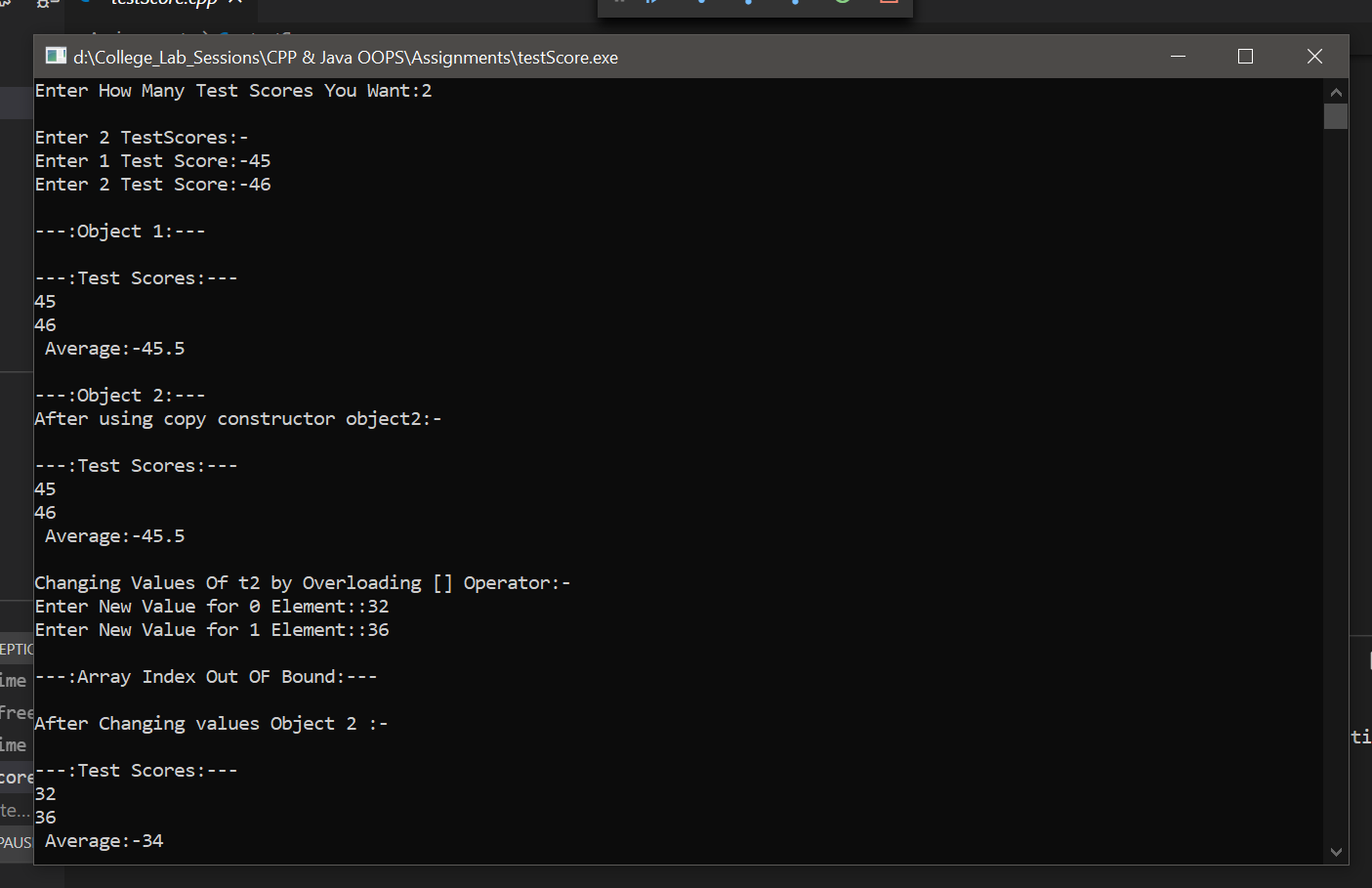
    t2.show();

    t2;

    t1;

}

**<<OUTPUT\_SCREENS>>**

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