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COSC 220

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Lab 12 writeup

Task 1 normal constructor initialization

```
dynClass::dynClass(int m1, int m2)
{
    member1=m1;
    member2=new int(m2);
}
```

Task 2 Copy constructor init

```
dynClass::dynClass(const dynClass& obj)
{
    member1=obj.member1;
    member2=new int;
    *member2=*obj.member2;
}
```

Task 3 destructor

```
dynClass::~~dynClass()
{
    cout << "Destructor is called\n";
}
```

Task 4 operator overload

```
dynClass& dynClass::operator=(const dynClass& obj)
{
    member1=obj.member1;
    *member2=*obj.member2;

    return *this;
}
```

Task 5 main implementation

```

#include "dynClass.h"

int main()
{
    dynClass test1(14,26);
    //initial constructor for test 1
    dynClass test2(test1);
    //copy constructor for second object
    dynClass test3 (15,17);
    test3=test1;
    //operator overload for 3rd object

    //all destructors called at the end

    return 0;
}

```

Test in linux environment

Build

```

root@DESKTOP-Q5H0GRD:/mnt/d/Documents/School/Year 3 semester 2/Cosc 220 computer science 2/labs/Lab_12# g++ -c lab_12.cpp
root@DESKTOP-Q5H0GRD:/mnt/d/Documents/School/Year 3 semester 2/Cosc 220 computer science 2/labs/Lab_12# g++ lab_12.o -o lab_12
root@DESKTOP-Q5H0GRD:/mnt/d/Documents/School/Year 3 semester 2/Cosc 220 computer science 2/labs/Lab_12#

```

Output

```

root@DESKTOP-Q5H0GRD:/mnt/d/Documents/School/Year 3 semester 2/Cosc 220 computer science 2/labs/Lab_12# ./lab_12
Destructor is called
Destructor is called
Destructor is called
root@DESKTOP-Q5H0GRD:/mnt/d/Documents/School/Year 3 semester 2/Cosc 220 computer science 2/labs/Lab_12#

```

Built successful all destructors called