

Student Information:

- Name: Katarina Humbert
- UAID: 010984092
- Assignment: lab2

Laboratory Contents:

```
Step #1:
string cdName = ""
string artistsName = ""
int numberOfSongsOnCD =
int yearCDCameOut =
string favoriteSongOnCD = ""

Step #2:
#include <iostream>
using namespace std;
class Music
{
    public:
        // Constructor methods
        Music();
        Music(const Music & music);
        ~Music();

private:
    // Object attributes
    string cdName;
    string artistsName;
    int numberOfSongsOnCD;
    int yearCDCameOut;
    string favoriteSongOnCD;
};

Step #3:
#include "music.h"
Music::Music()
{
    cdName = "";
    artistsName = "";
    numberOfSongsOnCD = 0;
    yearCDCameOut = 0;
    favoriteSongOnCD = "";
    cout << "In constructor\n";
}

Music::Music(const Music & Music)
{
    cout << "In copy constructor\n";
}

Music::~Music()
{
    cout << "In destructor\n";
}

Step #4:
main.cpp:(.text+0x6a): undefined reference to `Music::getcdName[abi:cxx11]()'
/usr/bin/ld: main.cpp:(.text+0x92): undefined reference to `Music::getartistsName[abi:cxx11]()'
/usr/bin/ld: main.cpp:(.text+0xb0): undefined reference to `Music::getnumberOfSongsOnCD()'
collect2: error: ld returned 1 exit status

Step #5:
Katarina Humbert, UARK ID: 010984092In constructor
In copy constructor
In destructor
In destructor

Step #6:
#include <iostream>
using namespace std;
class Music
{
    public:
        // Constructor methods
        Music();
        Music(const Music & music);
        ~Music();

        // Get methods
        string getcdName();
        string getartistsName();
        int getnumberOfSongsOnCD();
        int getyearCDCameOut();
        string getfavoriteSongOnCD();

        // Set methods
        void setcdName(string CDname);
        void setartistsName(string aName);
        void setnumberOfSongsOnCD(int numberOfSongs);
        void setyearCDCameOut(int year);
        void setfavoriteSongOnCD(string favSong);

        // Output methods
        void printAll();
        void printInteresting();

private:
    // Object attributes
    string cdName;
    string artistsName;
    int numberOfSongsOnCD;
    int yearCDCameOut;
    string favoriteSongOnCD;
};

Step #7:
#include "music.h"
Music::Music()
{
    cdName = "";
    artistsName = "";
    numberOfSongsOnCD = 0;
    yearCDCameOut = 0;
    favoriteSongOnCD = "";
    cout << "In constructor\n";
}

Music::Music(const Music & Music)
{
    cout << "In copy constructor\n";
}

Music::~Music()
{
    cout << "In destructor\n";
}

//Getter Methods
string Music::getcdName()
{
    return cdName;
}

string Music::getartistsName()
{
    return artistsName;
}

int Music::getnumberOfSongsOnCD()
{
    return numberOfSongsOnCD;
}

int Music::getyearCDCameOut()
{
    return yearCDCameOut;
}

string Music::getfavoriteSongOnCD()
{
    return favoriteSongOnCD;
}

//Setter Methods
void Music::setcdName(string CDname)
{
    cdName = CDname;
}

void Music::setartistsName(string aName)
{
    artistsName = aName;
}

void Music::setnumberOfSongsOnCD(int numberOfSongs)
{
    numberOfSongsOnCD = numberOfSongs;
}

void Music::setyearCDCameOut(int year)
{
    yearCDCameOut = year;
}

void Music::setfavoriteSongOnCD(string favSong)
{
    favoriteSongOnCD = favSong;
}

//Output Method
void Music::printAll()
{
    cout << "CD Name: " << cdName << endl;
    cout << "Artist's Name: " << artistsName << endl;
    cout << "The CD has " << numberOfSongsOnCD << "songs." << endl;
    cout << "The CD was released in the year " << yearCDCameOut << endl;
    cout << "My favorite song on the CD is " << favoriteSongOnCD << endl << endl;
}

void Music::printInteresting()
{
    cout << "Favorite CD Name: " << cdName << endl;
    cout << "My favorite song on my favorite CD is " << favoriteSongOnCD << endl;
}

Step #8:
#include <stdio.h>
#include <iostream>
#include "music.h"
int main()
{
    printf("Katarina Humbert, UARK ID: 010984092");
    //Declare Objects
    Music song1;
    Music song2(song1);
    //Call Getters
    song1.getcdName();
    song1.getartistsName();
    song1.getnumberOfSongsOnCD();
    song1.getyearCDCameOut();
    song1.getfavoriteSongOnCD();
    //Call Setters
    song1.setcdName("Queen - Greatest Hits");
    song1.setartistsName("Queen");
    song1.setnumberOfSongsOnCD(20);
    song1.setyearCDCameOut(2004);
    song1.setfavoriteSongOnCD("Somebody To Love");
    //Call Output Method
    song1.printAll();
    song1.printInteresting();
    return 0;
}

Step #9:
Katarina Humbert, UARK ID: 010984092In constructor
In copy constructor
CD Name: Queen - Greatest Hits
Artist's Name: Queen
The CD has 20songs.
The CD was released in the year 2004
My favorite song on the CD is Somebody To Love

Favorite CD Name: Queen - Greatest Hits
My favorite song on my favorite CD is Somebody To Love
In destructor
In destructor
```

Instructions:

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- Login to Blackboard and go to the labs section.
- Upload this PDF file for grading and feedback.