**Answer the questions in Exercise A in the following table and post it into the D2L**

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| **Program output and its order** | **Your explanation (why and where is the cause for this output)** |
| **constructor with int argument is called.** | It is called at line 12 in exAmain when: Mystring c = 3. Constructor MyString::Mystring (int n) is called |
| **default constructor is called.**  **default constructor is called.** | It is called at line 18 when Mystring x[2]. Constructor MyString::Mystring() is called |
| **constructor with char\* argument is called.** | It is called at line 22 when Mystring\* z = new Mystring(“4”). Constructor MyString::Mystring(const char \*s) is called |
| **copy constructor is called.**  **copy constructor is called.** | It is called at line 24 when x[0].append(\*z).append(x[1]). The append function creates the Mystring object “other” twice in its time. Constructor Mystring::Mystring(const Mystring& source)is called twice in this line as both calls to append creates a new one |
| **destructor is called.**  **destructor is called.** | It is called once line 24 finishes. When the functions return, the newly created Mystring objects go out of scope and the destructor is called for both times |
| **copy constructor is called.** | It is called at line 26 when Mystring mars = x[0]. This is a copy constructor instead of an assignment operator because this is the declaration of the Mystring object mars. Constructor Mystring::Mystring(const Mystring& source)is called |
| **assignment operator called.** | It is called at line 28 when x[1] = x[0]. This is an assignment operator because x[1] has already been created and is now being assigned. Function Mystring& Mystring::operator =(const Mystring& S) is called |
| **constructor with char\* argument is called.**  **constructor with char\* argument is called.** | It is called at line 30 when Mystring jupiter("White") and line 32 when ar[0] = new Mystring ("Yellow"). Constructor MyString::Mystring(const char \*s) is called |
| **destructor is called.**  **destructor is called.**  **destructor is called.**  **destructor is called.**  **destructor is called.** | It is called once line 33 finishes. When the block of code ends, x[0], x[1], mars, and jupiter all get out of scope and the destructor is called to destroy them. The Mystring object that z points too is also destroyed because after z goes out of scope, nothing points to it and it’s destroyed |
| **constructor with char\* argument is called.** | It is called at line 39 when Mystring d = "Green". Constructor MyString::Mystring(const char \*s) is called |
| **Program terminated successfully.** | It is printed from line 41 when cout << "\nProgram terminated successfully." <<endl; |
| **destructor is called.**  **destructor is called** | It is called once line 42 finishes. When the scope ends, Mystring objects ar[2] and d are destroyed |