**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. The statement, Mystring c = 3 is interpreted by the compiler as a call to the constructor Mystring::Mystring (int n). |
| **default constructor is called.**  **default constructor is called.** | It is called at line 18 in exAmain. The statement Mystring x[2] is an array with two Mystring objects that are not assigned values so it is interpreted by the compiler as a call to the default constructor twice. |
| **constructor with char\* argument is called.** | It is called at line 22 in exAmain. The statement new Mystring(“4”), creates a new object of type Mystring on the heap. The argument “4” is a string literal and can be passed to constructor as a char pointer. |
| **copy constructor is called.**  **copy constructor is called.** | It is called at line 24 in exAmain. The function append in mystring.cpp returns the value of the “this” pointer at line 107 which is a Mystring object so the copy constructor is called. Since the append function is called twice, the copy constructor is called twice. |
| **destructor is called.**  **destructor is called.** | It is called at line 102 in mystring using the statement delete []charsM, where charsM is a global variable, for the statement x[0].append(\*z).append(x[1]) at line 24 in exAmain. |
| **copy constructor is called.** | It is called at line 26 in exAmain. The statement Mystring mars = x[0] is initializing Mystring mars variable with an already existing Mystring object, x[0], so, it is interpreted by the compiler as a call to the copy constructor. |
| **assignment operator called.** | It is called on line 28 in exAmain. The statement x[1] = x[0] is interpreted by the compiler as a call to the assignment operator because x[1] and x[0] already exist. |
| **constructor with char\* argument is called.**  **constructor with char\* argument is called.** | It is called at line 30 and line 32 in exAmain. In both statements Mystring Jupiter(“ White”) and new Mystring(“Yellow”), the arguments, “White” and “Yellow” are string literals and they are passed to the constructor as char pointers to their location in static memory. |
| **destructor is called.**  **destructor is called.**  **destructor is called.**  **destructor is called.**  **destructor is called.** | It is called at line 34 in exAmain because Mystring x[2], Mystring\* z = new Mystring(“4”), Mystring mars = x[0], and Mystring Jupiter(“White”) have gone out of scope. |
| **constructor with char\* argument is called.** | It is called at line 39 in exAmain. The statement, Mystring d = “Green” is interpreted by the compiler as a call to the constructor Mystring::Mystring(const char \*s): lengthM((int)strlen(s)) |
| **Program terminated successfully.** | At line 41 in exAmain this statement is printed out. |
| **destructor is called.**  **destructor is called** | It is called at line 43 in exAmain for the statements Mystring d = “Green” on line 39 and Mystring c = 3 on line 12 because they go out of scope. |