

CS2400 Topics After the Midterm

Final Exam Topics += Study Guide Midterm

Chapter 6

File I/O

Formatting output using manipulators, flags etc.

Get function

Predefined character functions

Chapter 7 (7.1 – 7.3)

Arrays –

Declaring arrays

Declare and initialize an array

Two array access methods

What does the name of the array contains?

Formula to access an element of an array.

How to pass entire array/ indexed variable as function arguments.

How to find a maximum and minimum value of an array

How to find the largest or the smallest value of the index of an array

Calculate the sum and the average of an array

Partially filled arrays.

Search an array for a given value

Sort an array

`const` parameter modifier.

Problems similar to array work sheet from the lab

Chapter 8

Strings

- getline

- How use find, erase,substr etc.

- How to convert a string to a c_string

Vectors

- Basic constuction, initialization

- Safe accessing with the at member function

- The `push_back`, `size`, and `capacity` member functions (know what they do, and what the differernces between them are.

Chapter 10 and Chapter 11

Classes and objects

Member variables and member functions

Accessor and mutator functions (setters and getters)

Constructors

- Methods of constructor calls

- Default arguments (page 344)

Rules for writing an ADT

Making stream parameters versatile

Overloading operators:

- Binary operators

- As friends / non-members

- bool operators

- Arithmetic operators

- istream and ostream operators

Rules of overloading

Chapter 12

Separating into 3 files

Why, how to compile, what is included in each file

What are object files?

How to avoid multiple definitions of a class – what directives to include

Namespace –

Makefiles (covered in lecture material)

Do all the Self-Test Exercises

Types of questions:

T/F, Multiple choice

Short answers

Predict the output of a program with functions

Write a SVR and void functions to perform a specific task.

Write a class that performs some operations

Write a complete program with functions, arrays etc