Cosc Cheat sheet Jeremy Scheuerman Midexam 3

-Array indices start at 0 and are all integers and non negative

-There is no check on array indexes for out of bonds

-Arrays can be initialized during declaration if there are fewer initial values than the array size=, the rest are 0

-Arrays can only be passed to functions by reference not by value

-Arrays cannot be returned by functions

-Parallel arrays are used to hold parallel information related to the arrays

-2d arrays are arranged in table format

-2d arrays are processed one row at a time

-if arrays are partially initialized the rest of the values get set to 0

Pass by value DOSEN’T use & symbol, creates a COPY of the variable for use with the function and doesn’t modify the original

Pass by reference DOES use the & symbol modifies the ACTUAL value of the variable with the function and the changes are apparent to the variable in the class that the function was called as well

Function definition- statements that make up a function

Driver-a program used to test a function

Function stub-a function that is not finished yet but is used as a placeholder for debugging

Function overloading- creating several functions with the same names but different parameter lists

Default parameter- it is initialized in the beginning , if no value is given then the initialized value is used

-you cannot assign a constant value to a reference parameter

-library- a collection of predefined functions

Formal parameter- a parameter defined in the function heading

-scope resolution operator :: - allows a global variable declared before the definition of the function or block to be accessed by the function (or block), even if the function or block has an identifier with the same name as the variable

-signature (of a function) consist of the function name and its formal parameter list

-static variable, a variable that’s value persists between function calls

-external variable-a global variable declared within a function using the extern reserved word which indicates that the variable is declared elsewhere

-global variables are not recommended because it makes it difficult to find where errors occur

-return statement immediately ends the function call

-parameters-variables in a function that hold the values passed as argument

-arguments- the values entered into a function passed to the parameters

1. Variables of a function that retain their value over multiple calls to the function are called static variables
2. In C++ all functions have global scope
3. Default arguments are usually defined within the prototype of the function.
4. A function returning a value should never use pass by reference parameters
5. Every function that begins with a data type in the heading, rather than the word void, must have a return statement somewhere, usually at the end, in its body of instructions
6. A driver is a program that tests a function simply by testing it.
7. In C++ a block boundary is defined with a pair {}
8. A stub is a dummy function that just indicates that a function was called properly.
9. Default values are generally not given for pass by reference parameters
10. Overloaded functions are functions that have the same name but a different parameters list.