

CS 12

Midterm Review

Terms

- interactive program
- batch program
- stream
- recursive solution of a function
- iterative solution of a function
- pointer
- pass-by-value
- pass-by-reference
- array
- pointer to function
- string
- structure
- class
- abstract data type
- constructor
- destructor

Topics

- Formatting Output
 - C++, using cout
 - printf
 - precision
 - width
 - fill characters
 - iosflags - left, right, showpoint, showpos, fixed, scientific
 - printing in other bases - decimal, hexadecimal, octal
- Reading Input

- extraction operator
 - get - reading a character
 - get - reading a string
 - getline
- File Processing
 - declaring a file stream
 - opening
 - verification of open
 - reading from a file
 - writing to a file
 - closing
- Recursion vs. Iteration
- Multi-Dimensional Arrays
- Pointers
 - Indirect Assignment and Accessing
 - Pass-by-Reference
 - using pointers with arrays
 - pointers to functions
 - dynamic allocation
- Strings
 - declaring - using array format, using pointer format
 - initializing
 - manipulating - using string functions
 - * strlen
 - * strcpy
 - * strncpy
 - * strcmp
 - * strncmp
 - * strcat
 - * strncat
 - * strchr
 - * strstr
 - * strtok
- Structures

- Classes
 - Controlling Access to members
 - * public
 - * private
 - * protected
 - Constructor
 - Destructor