CISC105 – General Computer Science

Class 14 – 07/19/2006

Review

- Strings
  - strcpy(), strncpy() – string copy functions
  - strcat(), strncat() – string concatenation
  - strcmp(), strncmp() – string comparison
  - strlen() – string length
  - strtok() – string token
  - gets() – gets a line of data from the input
  - fgets() – gets a line of data from an input file
  - getchar() – gets the next character in the buffer
  - fgetchar() – get the next character from an input file

Character Analysis

- There are many ways to analyze characters available in the ctype.h library
- `isdigit, isalpha, islower, isupper, ispunct, ispace, tolower, toupper`
- charan1.c & charan2.c

Introduction to Structures

- A database is a collection of information stored on a computer.
- The smallest subdivision in a database is a record
- A structure is a data type that contains multiple components that you define!

Structures

- Direct Component Selection Operator – once you declare a structure type you can access a component by using `structure_name.component`
  - See struct1.c
- A structure can have a component that is a structure!
  - See struct2.c

Passing structures as Parameters

- You can pass structures as parameters in the same way that you pass other data types.
- See struct3.c

An Array of Structures

- You can declare and use and array of structures
- See struct4.c