**MONTH 1 CONCEPTS TO LEARN (ALX)**

1. POINTERS IN C

* Declaring and dereferencing pointers
* Pointer arithmetic

1. DATA STRUCTURE I

* Arrays
* Declaring and initializing arrays
* Accessing array elements
* Types of arrays (multidimensional arrays etc.)
* Strings as arrays.

1. POINTERS IN C

* Pointers to pointers

1. RECURSION IN C

* Recursive functions
* Recursion vs iteration
* Solving problems(factorial, Fibonacci series, binary search) recursively

1. COMMAND LINE BEHAVIOUR (CLB) FUNCTIONS

* Argument count and its application
* Argument vector/value and its application

1. STATIC LIBRARIES IN C

* Definition of a library and its use
* The ‘*ar*’ and ‘*ranlib*’ functions for creating libraries
* Dynamic and static libraries(The differences)

1. MEMORY MANAGEMENT IN C

* Memory allocation functions and application(malloc(), calloc(), realloc() & free()).

1. PREPROCESSORS IN C (CPP)

* Understanding the compilation process
* Macros (definition and types-object like macros, function like macros etc. defining macros)
* Preprocessor directives
* Predefined Macros and use.
* Include guards

1. DATA STRUCTURE II

* Structs(Declaring and accessing structs)
* Pointers to *structs*
* Documentation of *structs*
* The *typedef* keyword

1. POINTERS IN C

* Pointers to functions (syntax for declaration and application)

1. VARIADIC FUNCTIONS

* Declaration and definition
* The *stdarg* library.
* *const* keyword

1. PRINTF GROUP PROJECT