June 23, 2015

Launchpad

Lecture - 6

Programming Fundamentals - 5

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CODING BLOCKS

Status of Assignment?

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Any doubts?

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Pointers vs Arrays

I.   the sizeof operator
     I.   sizeof(array) returns the amount of memory used by all elements in array
     II. sizeof(pointer) only returns the amount of memory used by the pointer variable itself
II. the & operator
     I.   &array is an alias for &array[0] and returns the address of the first element in array
     II. &pointer returns the address of pointer
III. String literal initialization of a character array
     I.   char array[] = "abc" sets the first four elements in array to 'a', 'b', 'c', and '\0'
     II. char *pointer = "abc" sets pointer to the address of the "abc" string (which may be stored in read-only memory and thus unchangeable)
IV. Pointer variable can be assigned a value whereas array variable cannot be.
     int a[10];
     int *p;
     p=a; /*legal*/
     a=p; /*illegal*/
V.   Arithmetic on pointer variable is allowed.
     p++; /*Legal*/
     a++; /*illegal*/

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Character Arrays!

Character Pointer! (char * ptr)

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Null Character! ('\0')

cin.getline

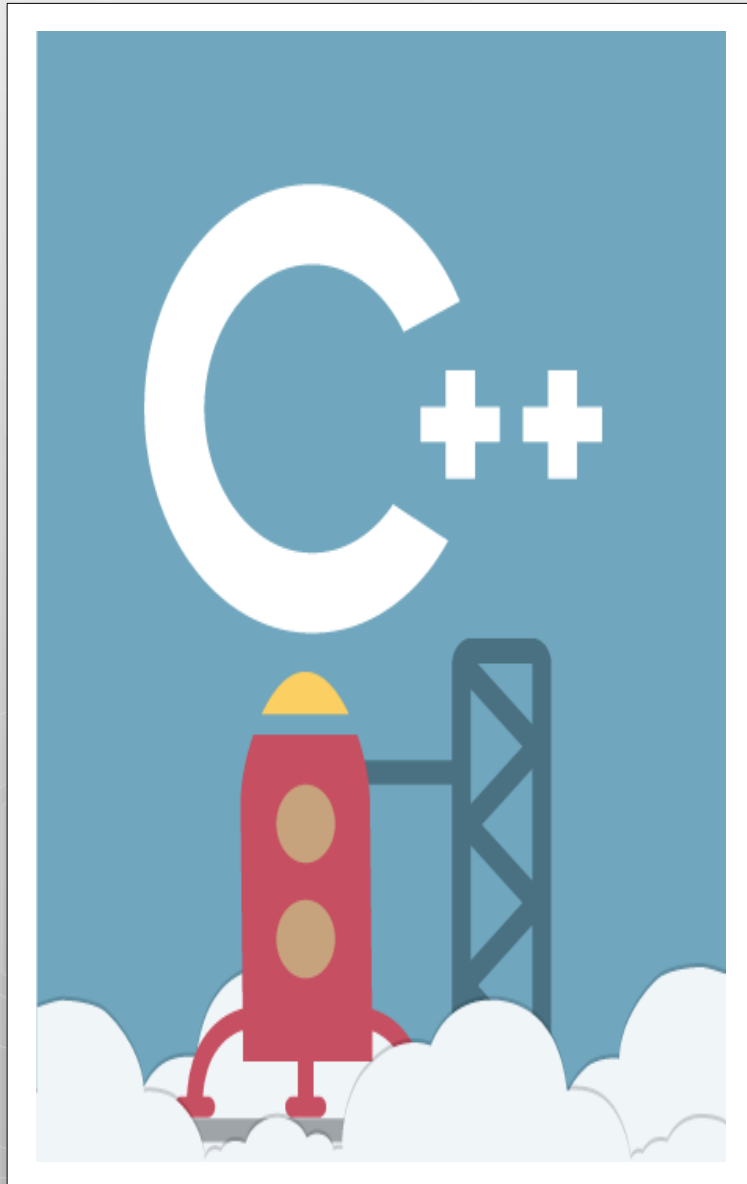# Lets do some problems!

I.   Calculate Length of the String

II. Check if a string is palindrome or not

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Time to try?

I.   Write a function which takes two strings A and B and appends B to A

II. Write a function to reverse a string.

III. Write a program to print all substrings of a given string

IV. Given a string rotate it by n characters. e.g. if the string is CodingBlocks and n =3 then the output should be cksCodingBlo

V.   Write a function to check if two strings are permutations of each other.

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What is next class about?

I.   Arrays contd… + Recursion

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Thank You!

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