7. PROGRAMMING ASSIGNMENT 7: UPDATED 7/25/17 with given boxed code.
Read: Chapter 10
Programming: Name your program p7.c
DUE: Tuesday August 1, 2017 @ 6am
This program will use character strings, functions, and pointer notation to reverse the input string in place (change original sentence).

a) Each function should have a short header comment describing its purpose.

b) main() reads input and prompts for program repetition.
   fgets() will read in an entire line of input where “MAX_STR” is a symbolic constant value of 81. e.g. “fgets(inputStr, MAX_STR, stdin);”
   Note: fgets() includes the trailing “newline” character. Refer to your Character Strings handout. Note: “getchar();” is not needed after fgets().
   main() calls strRev() and passed one character string with this declaration:
   void strRev(char *pS);

c) In strRev(), use pointer notation within ALL code of function definition.
   A local temporary character string, tmpStrg, can hold the input sentence.
   e.g. “Proud to be UCSD” --> “DSCU eb ot duorP”
   Remember: A character string is terminated with the end of string sentinel (null character '\0'). The original sentence IS modified.

   HINTS: Solve this problem in small steps. Compile and test gradually.
   1) In main(), write the code for steps a, b), d) and f) above. Test.
   2) In strRev(), copy (strcpy) the input sentence “inputStr” into tmpStrg.
      Assign from tmpStrg beginning element into ending element of original word. You may want to include <string.h> for function strcpy(), strncpy(), strlen().
      Use printf() to help debug temporary strings.
   3) Add a “getchar()” in main():

   printf ("Want to reverse another sentence? ");
   answer = getchar();
   getchar();

   4) Complete error checking. Test. Test. Test. DONE!

PA#7 SAMPLE OUTPUT:

Enter a sentence: Summer Fun Time!
"Summer Fun Time!" reversed is "!emiT nuF remmuS"
Want to reverse another sentence? X

Enter a sentence: Yaaayyy! Last Program=)
"Yaaayyy! Last Program=" reversed is "")=margorP tsaL !yyyaaaY"
Want to reverse another sentence? Z

Enter a sentence: Angus Arnold Seth
"Angus Arnold Seth" reversed is "hteS dlonrA sugnA"
Want to reverse another sentence? N

SAMPLE INPUT (is in bold type above)

Submit the final version of your program as “p7.c”.

Verify you saved your work in the Documents - cs5u HOME directory.