Wednesday, January 24, 2018

Write a function called reverse that accepts a c-string as an argument and reverses that argument in place returning the address of the first element of the c-string as a character pointer when you are finished. For example, if your c-string contains the string "Happy Birthday!" then after a call to the function your string would contain "!yadhtriB yppaH". For this assignment you may not use the string.h library or any other library except stdio.h. You may assume the following main program which would print the string forward, backward, and then forward again twice:

```
int main(int argc, char* argv[])
{
	char word[] = "Happy Birthday!";

	printf("%s\n", word);
	reverse(word);
	printf("%s\n", word);
	printf("%s\n", reverse(word));
	printf("%s\n", word);
	return 0;
}
```

Place the code for your function in a file called reverse.c and submit only this file to me on blackboard. The file should contain the definition for your function reverse and nothing else. I will use my own header file and main program to test your code. Please keep in mind that this function should work for any valid C style string and the fact that the above program works for "Happy Birthday!" is just one example.