MIPS Assembly Language Programming

Programming Assignment # 3
100 points

Due: 11:59pm, Nov. 8, 2009

Write a function called *search* in MIPS assembly language. The function should have two arguments. The first is any character in the ASCII Table to be searched for; the second is a pointer to any null-terminated string. The *search* function should locate the first instance of the sought-after character in the string and return its address. If that character does not exist in the string, then *search* should return the address of the null character at the end of the string. For example, if the arguments to *search* are the character 's' and a pointer to the string 'University of Tennessee', then the return value will be the address of the seventh character in the string. The function should accept strings of up to 255 characters. Thoroughly test your function. Be sure the function correctly handles the situation where the character is not in the string.

Write a main program that calls the function *search* with a character and string pointer to illustrate its correct execution. The code should be written so that both the character and the string are entered from the console with appropriate prompts. The code must follow proper MIPS convention for calling and returning from functions. Remember to properly document both your main program and function *search.*

Please email your code **as an attachment** to eecs355fall2009@gmail.com by 11:59pm, Sunday, November 8. **20 points per day** will be **deducted** from your grade for late submissions. Students not submitting code by 11:59pm Tuesday, November 10, will receive a **zero** for the lab.