

Problem 23. (10 points):

Consider the following assembly code for a C for loop:

```
loop:
    pushl %ebp
    movl %esp,%ebp
    movl 0x8(%ebp),%edx
    movl %edx,%eax
    addl 0xc(%ebp),%eax
    leal 0xffffffff(%eax),%ecx
    cmpl %ecx,%edx
    jae .L4
.L6:
    movb (%edx),%al
    xorb (%ecx),%al
    movb %al,(%edx)
    xorb (%ecx),%al
    movb %al,(%ecx)
    xorb %al,(%edx)
    incl %edx
    decl %ecx
    cmpl %ecx,%edx
    jb .L6
.L4:
    movl %ebp,%esp
    popl %ebp
    ret
```

Based on the assembly code above, fill in the blanks below in its corresponding C source code. (Note: you may only use the symbolic variables `h`, `t` and `len` in your expressions below — *do not use register names.*)

```
void loop(char *h, int len)
{
    char *t;

    for ( _____; _____; h++,t--) {
        _____;
        _____;
        _____;
    }

    return;
}
```