

```

## Program 0   Gordie Howe
##
## This program will do a string copy { strcpy(str2,str1); }
##
## Register usage
##     t0     str[i] (a character)
##     t1     address of str1[i]
##     t2     address of str2[i]

#####
#
#           text segment
#
#####

        .text
        .globl __start
__start:

        la     $t1, str1      # t1 points to str1[0]
        la     $t2, str2      # t2 points to str2[0]
#
# do while not at end of string
#
top:     lb     $t0, ($t1)     # get character into t0
        sb     $t0, ($t2)     # put character into str2

        add    $t1, $t1, 1    # increment pointers
        add    $t2, $t2, 1

        bnez   $t0, top       # keep going if current char != '\0'
#
# print string str1
#
        la     $a0, str1
        li     $v0, 4
        syscall                # print_string
#
# print string str2
#
        la     $a0, str2
        li     $v0, 4
        syscall                # print_string
#
# exit();
#
        li     $v0, 10
        syscall

#####
#
#           data segment
#
#####

        .data

```

```
str1: .ascii "hello\n"      # char str1[] = "hello\n";
str2: .space 1024           # char str2[1024];
```