

```

# hello.asm - print out "hello world"
#
#   a0 - points to the string
#-----
#           text segment                               #
#-----

        .text

        .globl main
main:    # execution starts here
        la $a0, str      # put string address into a0
        li $v0, 4 # system call to print
        syscall          # out a string

        li $v0, 10
        syscall          # exit

#-----
#           data segment                               #
#-----

        .data

str:    .asciiz "hello world\n"

# end of file hello.asm

```

Service	System Call Code	Arguments	Result
print_int	1	\$a0 = integer	
print_float	2	\$f12 = float	
print_double	3	\$f12 = double	
print_string	4	\$a0 = string	
read_int	5		integer (in \$v0)
read_float	6		float (in \$f0)
read_double	7		double (in \$f0)
read_string	8	\$a0 = buffer, \$a1 = length	
sbrk	9	\$a0 = amount	address (in \$v0)
exit	10		

Table 1: SPIM System services.