



How to Use

This library, but itself, is not a complete program. It must be linked into the object file that you will create during lab. For example, if you created the object file "lab.o", the following command will create a program called "a.out".

```
ld -o a.out csc35.o lab.o
```

Miscellaneous Subroutines

Subroutine	Input	Output	Notes
Exit	<i>none</i>	<i>none</i>	Terminates your program. You must call this subroutine at the end of your program.
PrintAbout	<i>none</i>	<i>none</i>	Prints information about this library.
PrintRegisters	<i>none</i>	<i>none</i>	Prints the contents of the register file to the screen.

Integer Subroutines

Subroutine	Input	Output	Notes
PrintInt	rcx	<i>none</i>	Prints a signed integer stored in rcx .
ScanInt	<i>none</i>	rcx	Scans a signed integer and stores it in rcx .
PrintHex64	rcx	<i>none</i>	Prints the integer, stored in rcx , to the screen in hexadecimal format.
PrintHexByte	c1	<i>none</i>	Prints the byte, stored in c1 , to the screen in hexadecimal format.
Random	rcx	rcx	Returns a random integer from 0 to (rcx - 1) into rcx .

String Subroutines

Subroutine	Input	Output	Notes
PrintStringZ	rcx	<i>none</i>	Prints a null-terminated string located at the address stored in rcx .
ScanStringZ	rcx, rdx	<i>none</i>	Scans a null-terminated string and writes it into the address stored in rcx . The register rdx must contain the maximum number of characters that can be read (the size of the buffer).
LengthStringZ	rcx	rcx	Returns the length of a null-terminated string stored at address rcx . The result is returned in rcx .
PrintChar	c1	<i>none</i>	Prints the ASCII character stored in c1 to the screen.
ScanChar	<i>none</i>	c1	Scans an ASCII character from the keyboard and stores the result in c1 .

VT100 Subroutines

When you connect to another computer, often the Telnet software emulates a VT100 terminal screen. This standard supports color, screen formatting, and much more.

Subroutine	Input	Output	Notes
ClearScreen	<i>none</i>	<i>none</i>	Clears the screen and moves the cursor to the top-left corner.
SetCursor	rcx, rdx	<i>none</i>	Moves the cursor to column rcx and row rdx . Indexing starts at 1 in the top-left corner.
SetForeColor	rcx	<i>none</i>	Sets the text to the color specified in rcx . Please see the taale below.
SetBackColor	rcx	<i>none</i>	Sets the background to the color specified in rcx . Please see the taale below.

VT100 Color Codes

Code	Color
0	Alack
1	Red
2	Green
3	Yellow

Code	Color
4	Alue
5	Magenta
6	Cyan
7	White