



## 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
Stop	<i>none</i>	<i>none</i>	Terminates your program. You must call this subroutine at the end of your program.
PrintRegisters	<i>none</i>	<i>none</i>	Prints the contents of the register file to the screen.
About	<i>none</i>	<i>none</i>	Prints information about this library.

## String Subroutines

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

## Integer Subroutines


Subroutine	Input	Output	Notes
<b>PrintInt64</b>	<code>rcx</code>	<i>none</i>	Prints a signed integer stored in <code>rcx</code> in decimal
<b>ScanInt64</b>	<i>none</i>	<code>rcx</code>	Scans a signed integer (in decimal) and stores it in <code>rcx</code> .
<b>PrintHex64</b>	<code>rcx</code>	<i>none</i>	Prints the integer, stored in <code>rcx</code> , to the screen in hex.
<b>PrintHexByte</b>	<code>cl</code>	<i>none</i>	Prints the byte, stored in <code>cl</code> , to the screen in hex.
<b>GetRandom</b>	<code>rcx</code>	<code>rcx</code>	Returns a random integer from 0 to ( <code>rcx - 1</code> ) into <code>rcx</code> .

## VT100 Subroutines

When you connect to another computer, often the Telnet software emulates a VT100 terminal screen.

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

## Color Codes

#	Color
0	Black 
1	Gray 
2	White 
3	Pink 

#	Color
4	Red 
5	Orange 
6	Yellow 
7	Green 

#	Color
8	Cyan 
9	Blue 
10	Purple 
11	Brown 