



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
ExitProgram	<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
PrintInteger	<i>rsi</i>	<i>none</i>	Prints a signed integer stored in <i>rsi</i> in decimal
ReadInteger	<i>none</i>	<i>rsi</i>	Scans a signed integer (in decimal) and stores it in <i>rsi</i> .
PrintHex	<i>rsi</i>	<i>none</i>	Prints the integer, stored in <i>rsi</i> , to the screen in hexadecimal format.
PrintHexByte	<i>sil</i>	<i>none</i>	Prints the byte, stored in <i>sil</i> , to the screen in hexadecimal format.
GetRandom	<i>rsi</i>	<i>rsi</i>	Returns a random integer from 0 to (<i>rsi</i> - 1) into <i>rsi</i> .

String Subroutines

Subroutine	Input	Output	Notes
PrintString	<code>rsi</code>	<i>none</i>	Prints a null-terminated string located at the address stored in <code>rsi</code> .
ReadString	<code>rsi</code> , <code>rdi</code>	<i>none</i>	Scans a null-terminated string and stores it into the address stored in <code>rsi</code> . The register <code>rdi</code> must contain the maximum number of characters that can be stored (size of the buffer).
LengthString	<code>rsi</code>	<code>rsi</code>	Returns the length of a null-terminated string stored at address <code>rsi</code> . The result is returned in <code>rsi</code> .
PrintChar	<code>sil</code>	<i>none</i>	Prints the ASCII character stored in <code>sil</code> .
ReadChar	<i>none</i>	<code>sil</code>	Scans an ASCII character from the keyboard and stores the result in <code>sil</code> .




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.
MoveCursor	<code>rsi</code> , <code>rdi</code>	<i>none</i>	Moves the cursor to column <code>rsi</code> and row <code>rdi</code> . Indexing starts at 1 in the top-left corner.
ChangeTextColor	<code>rsi</code>	<i>none</i>	Sets the text to the color specified in <code>rsi</code> . Please see the table below.
ChangeBackColor	<code>rsi</code>	<i>none</i>	Sets the background to the color specified in <code>rsi</code> . Please see the table below.

VT100 Color Codes

Code	Color
0	Black 
1	Red 
2	Green 
3	Yellow 

Code	Color
4	Blue 
5	Magenta 
6	Cyan 
7	White 