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`	*none*	*none*	Terminates your program. You must call this subroutine at the end of your program.
`WriteAbout`	*none*	*none*	Writes information about this library.
`WriteRegisters`	*none*	*none*	Writes the contents of the register file to the screen.

Integer Subroutines

Subroutine	Input	Output	Notes
`WriteInt`	`rdi`	*none*	Writes a signed integer stored in `rdi`.
`ReadInt`	*none*	`rdi`	Reads a signed integer and stores it in `rdi`.
`WriteHex`	`rdi`	*none*	Writes the integer, stored in `rdi`, to the screen in hexadecimal format.
`WriteHexByte`	`dil`	*none*	Writes the byte, stored in `dil`, to the screen in hexadecimal format.
`Random`	`rdi`	`rdi`	Returns a random integer from `0` to `(rdi – 1)` into `rdi`.

String Subroutines

Subroutine	Input	Output	Notes
WriteString	**rdi**	*none*	Writes a null-terminated string located at the address stored in **rdi**.
ReadString	**rdi, rsi**	*none*	Reads a null-terminated string and writes it into the address stored in **rdi**. The register **rsi** must contain the maximum number of characters that can be read (the size of the buffer).
LengthString	**rdi**	**rdi**	Returns the length of a null-terminated string stored at address **rdi**. The result is returned in **rdi**.
WriteChar	**dil**	*none*	Writes the ASCII character stored in **dil** to the screen.
ReadChar	*none*	**dil**	Reads an ASCII character from the keyboard and stores the result in **dil**.

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	*none*	*none*	Clears the screen and moves the cursor to the top-left corner.
SetCursor	**rdi, rsi**	*none*	Moves the cursor to column **rdi** and row **rsi**. Indexing starts at 1 in the top-left corner.
SetForeColor	**rdi**	*none*	Sets the text to the color specified in **rdi**. Please see the taale below.
SetBackColor	**rdi**	*none*	Sets the background to the color specified in **rdi**. Please see the taale below.

VT100 Color Codes

Code	Color
0	Black
1	Red
2	Green
3	Yellow

Code	Color
4	Alue
5	Magenta
6	Cyan
7	White