| Trap <br> Num. | Register Inputs | Meaning |
| :---: | :--- | :--- |
| 0 | Register 1: 0 | Halt the Larc computer. |
| 1 | Register 1: 1 <br> Register 2: memory address <br> Register 3: maximum length | Output a string. Values from memory are printed to the I/O console as <br> characters starting from the address in Register 2 and continuing until <br> a zero value is encountered or the number of characters output equals <br> the maximum length from Register 3. (The zero at the end of a string <br> is not output.) |
| 2 | Register 1: 2 <br> Register 2: output value | Output an integer. The number in register 2 is output to the I/O <br> console as a signed decimal integer. |
| 3 | Register 1: 3 <br> Register 2: memory address <br> Register 3: maximum length | Input a string. The user must type a line of input. Characters from the <br> line are copied to memory starting at the address from Register 2 until <br> the end of the input line is reached or until the number of characters is <br> equal to the maximum length from Register 3. A zero is stored at the <br> end of the string. On return, Register 3 contains the length of the <br> saved string, not counting the zero at the end. |
| 4 | Register 1: 4 | Input an integer. The user must type an integer in the range -32768 to <br> 65535. On return from the syscall, Register 1 contains the user's input <br> as a 16-bit integer. |


| Base 10 | Base 16 | Base 2 |
| :---: | :---: | :---: |
| 0 | 0 | 0000 |
| 1 | 1 | 0001 |
| 2 | 2 | 0010 |
| 3 | 3 | 0011 |
| 4 | 4 | 0100 |
| 5 | 5 | 0101 |
| 6 | 6 | 0110 |
| 7 | 7 | 0111 |
| 8 | 8 | 1000 |
| 9 | 9 | 1001 |
| 10 | $A$ | 1010 |
| 11 | $B$ | 1011 |
| 12 | $C$ | 1100 |
| 13 | $D$ | 1101 |
| 14 | E | 1110 |
| 15 | F | 1111 |

