



## Input System

Accepts binary, hexadecimal, and possibly signed decimal inputs. Proceeds to print the recorded value to the user interface or display.

## Sorting System

Takes temporary values and sorts by prefix, isolating hexadecimal (**0x**) and binary (**0b**) and misc.

## ASCII Conversion

Converts ASCII character strings into tangible integer values for subsequent addition operation.

## Addition Operation

Add together the 32-bit 2SC. integers and store the resulting value into **\$s0** for later use.

## Convert to Base<sub>4</sub>

Take **\$s0** and manipulate stored value to convert into a **signed, base<sub>4</sub>** resultant.

## Display Answer

After adding **\$s1** and **\$s2** as well as converting **\$s0** to **base<sub>4</sub>**, we display our answer to the output screen. *If the sign bit is negative, print a negative sign. If positive, only print magnitude.*