

## Register Panel Hex

The screenshot shows the Mars MIPS simulator interface. The top menu bar includes File, Edit, Run, Settings, Tools, and Help. Below the menu is a toolbar with various icons. The main window is divided into several panels:

- Text Segment:** A table showing assembly code with columns for Bkpt, Address, Code, Basic, and Source. The code includes instructions like `lui $t0, 0x00001001`, `ori $t1, 0x0000000c`, `addiu $t2, $t0, 0x00000004`, `syscall`, `li $t3, 4`, `syscall`, `li $t4, 4`, `syscall`, `lw $t5, id`, and `li $t6, 1`.
- Data Segment:** A table showing memory addresses and their corresponding values in hexadecimal.
- Mars Messages:** A text area displaying the output of the program, including the family name, student ID, and the number of characters in the last name.
- Registers:** A table showing the current values of the MIPS registers in hexadecimal. The registers are labeled \$zero, \$at, \$v0, \$v1, \$a0, \$a1, \$a2, \$a3, \$t0, \$t1, \$t2, \$t3, \$t4, \$t5, \$t6, \$t7, \$s0, \$s1, \$s2, \$s3, \$s4, \$s5, \$s6, \$s7, \$t8, \$t9, \$k0, \$k1, \$gp, \$sp, \$fp, \$ra, \$pc, \$hi, and \$lo.

## Register Panel ASCII

The screenshot shows the Mars MIPS simulator interface, similar to the previous one, but with the Register Panel in ASCII view.

- Text Segment:** The same assembly code as in the previous screenshot.
- Data Segment:** The same memory addresses and values as in the previous screenshot.
- Mars Messages:** The same output as in the previous screenshot.
- Registers:** A table showing the current values of the MIPS registers in ASCII. The registers are labeled \$zero, \$at, \$v0, \$v1, \$a0, \$a1, \$a2, \$a3, \$t0, \$t1, \$t2, \$t3, \$t4, \$t5, \$t6, \$t7, \$s0, \$s1, \$s2, \$s3, \$s4, \$s5, \$s6, \$s7, \$t8, \$t9, \$k0, \$k1, \$gp, \$sp, \$fp, \$ra, \$pc, \$hi, and \$lo.