Panel 16

The PAL Instruction Set:

inw   dst
> Read a word from the keyboard and store in dst. Similarly for inb, inf.

outw src
> Print scr on the screen as a signed integer. Similarly for outb (prints as a character) and outf (prints as a float).

movw src dst
> Performs dst = src   Similarly for movb and movf.

addw src dst
> Performs dst = src + dst. Similarly for addb and addf.

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Panel 17

subw   src dst
> Performs   dst = dst - src. Similarly for subb and subf.

mulw src dst
> Performs dst = dst * src. Similarly for mulb and mulf.

divw   src dst
> Performs dst = dst / src. For w and b does integer division. For f form does floating point division.

cvtfw   src dst
> Converts floating point in source to word (integer) in dst. Rounds to nearest int.

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Panel 18

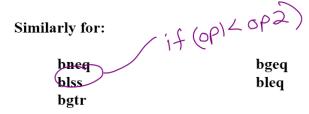**cvtwf   src   dst**

   Converts word (integer) in source to float in dst.

cmpw op1 op2

   Compares op1 with op2 and sets the conditions codes appropriately.
   Similarly for cmpb and cmpf. The conditions codes can be used by
   branch instructions.

beq   dst

   Branch to dst if the result of the last comparison was "equal"

   Similarly for: if (op1 < op2)

   bneq   **bgeq**
   blss   **bleq**
   bgtr

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Panel 19

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jmp dst

   Does an unconditional jump (regardless of condition codes) to dst.

call num dst

   Calls procedure specified by "dst" assuming "num" parameters have
   been pushed onto the run time stack. Will do in more detail later.

ret

   Returns from the current subprogram. Will do in more detail later.

end

   Stops execution.

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