

CS2318

09/22/06

Pseudo Code (C-like)

1) Arithmetic exp

2) Boolean expression

~~B~~ B = (A || B) && (B || 1)

3) ~~If {exp}~~

3 if (B exp)

{ EXP }

Else { EXP }

4) While { BEXP }

{ EXP }

5) for ({ EXP } ; { BEXP } ; { EXP } ;

{ EXP }

2

6) do EXP
while BEXP

7 Case

$\{ \text{or } i = 0; i < 100; i++ \}$

$\{ a[i] = i \}$

s_0

\uparrow
EXP

Loop executed even for first

time even if the condition

is false

$l_i \$BP, 0$

$l_i \$SI, 100$

SW

3

for($i = 0$; $i < 100$; $i++$)

$a[i] = i$

$s_0 \equiv i$ $s_1 \equiv a$ to pointer

$l_i \ \$s_0, 0$; $l_i \ \$r, 0$

$\Rightarrow \underline{\underline{la \ \$s, a}}$;

$l_i \ \$to, 0$;

$l_i \ \$t1, 100$;

not nice

for($sw \ \$s_0, (\$s1)$ $a[i] = i$;

$addi \ \$0, \$0, 1$; $addi \ \$s1, \$s1, 4$

$blt \ \$s0, \$t1, for$;

end

4

int array [1024]
int J;

data one time per
array space 4096 static dot

J: space 4

La \$Rd, J pseudo inst

* \$Rd ← location of J

System calls code in \$V0

Arguments in \$a0

result in \$V0