mam () is translated to: INISTKERM O data men INITSTKFRM WRITESTRING 12 E' EXPRITACK PUSHSTATADOR O READINT 368-1-7 1030- (986) 10 16 % 159 16 0 SAVETOADDR evaluate expression. y- a/2 U EXPRITACK 1) Translation of return y-alou; in method fl) (Instruction that leave value of y- afour on the top of ex Exprostack. 7316 return 3. stack frame of each call of f() is as on follows. -4 E To leave value of y-ox, u on top of Exprestack. return address (Free Pointer) dynamic link 51: PUSH STATADOR 0 7619 +1 LOADFROM APDR +2 +34 PUSHLOCADOR -4 Expretack Exprstach LOADFROMADDR TOPY PUSH LOCAPOR +3 LOADFROM ADDR of Maybe: ADD, SUB. DIV, MUL MOD MOD, OR fg: SUB EQ, NE, LE, LT, GE, GT

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C53/6 4/30/2014 Translation of f(21,22,23) PUSHNUM 21 PASSPARAM PUSHNUM 22 PASSPARAM PUSHNUM 23 PASSPARAM CAUSTATMETHOD 34. A Translation of y+ (21,22,23) PUSHSTATADOR 1 LOADFROMADDR Code to call f(21, 23.23) ADD Translation of f (17, y, (x-y)); push MUM 17 PasspARAM y SpusH STATADDR LODASTATADOR

(PASS PARAM

7-y / LODASTATADOR

(PUSHSTATADOR)

PUSH STATADOR 1

LODASTATADDR

PASSPARAM.

in main() Pata MEM statically allocated mein' stack frame Caller responsibility add 30 INITSTAKFRM?

In Assignment 1, call a parsing method n() will read an <n> and output a parce tree with root <n> In Assignment 2, that call of n() will also generate LAZ. code for that instance of CAZ.

CallSTATMETHOD 34 DISCARDVALUE

For any node <1> in the Tiny I same file parse tree, let mean the UM instruction generated by the compiler for (n). Ex: if <n> is the estatement> node for + (17, y, x -y) in the above program, then <n>. code = instructions 8-20 in the generated code