Appendix to *Let's build a compiler!* containing examples of test programs and test data

Testing TINY11

We copied the generated code into a simple program to test it, then tabulated the results. We provide some examples of the generated code in the table.

Program	Input	Generated Code	Error Message	Result
TINY11	PROGRAM VAR I,PRODUCT BEGIN I=1 PRODUCT=1 WHILE i<5 i=i+1 PRODUCT=PRODUCT*i ENDWHILE END.	Place-holder for MASM start-up code LIB TINYLIB Var I : integer = 0; Var PRODUCT : integer = 0; MAIN: MOV EAX, 1 MOV I, EAX MOV EAX, 1 MOV PRODUCT, EAX @L0: MOV EAX, I PUSH EAX MOV EAX, 5 POP EDX CMP EDX, EAX CMOVL EAX, T CMOVGE EAX, F TEST EAX, -1 JE @L1 MOV EAX, I PUSH EAX MOV EAX, 1 POP EDX ADD EAX, EDX MOV I, EAX MOV EAX, PRODUCT PUSH EAX MOV EAX, I POP EDX IMUL EDX MOV PRODUCT, EAX JMP @L0 @L1: Place-holder for epilog		120
TINY11	PROGRAM VAR INPUT BEGIN READ(INPUT) WRITE(INPUT+1) END.	Place-holder for MASM start-up code LIB TINYLIB Var INPUT : integer = 0; MAIN: CALL READ MOV INPUT, EAX MOV EAX, INPUT PUSH EAX MOV EAX, 1 POP EDX ADD EAX, EDX CALL WRITE Place-holder for epilog		
TINY11	PROGRAM VAR INPUT1 BEGIN READ(INPUT) WRITE(INPUT) END.	Var INPUT1 : integer = 0; MAIN:	Error: Undefined Identifier INPUT.	

TINY11	PROGRAM
	VAR X,Y,GREATER
	BEGIN
	X=(1+2)*3
		Place-holder for MASM start-up code
		LIB TINYLIB
				10

	Y=90/9
	IF X>Y
	GREATER=X
	ELSE
	GREATER=Y
	ENDIF
	END.
			Var X : integer = 0;
			Var Y : integer = 0;
			Var GREATER : integer = 0;
			MAIN:
			MOV EAX, 1
			PUSH EAX
			MOV EAX, 2
			POP EDX
			ADD EAX, EDX
			PUSH EAX
			MOV EAX, 3
			POP EDX
			IMUL EDX
			MOV X, EAX
			MOV EAX, 90
			PUSH EAX
			MOV EAX, 9
			MOV ECX, EAX
			POP EAX
			XOR EDX, EDX
			IDIV ECX
			MOV Y, EAX
			MOV EAX, X
			PUSH EAX
			MOV EAX, Y
			POP EDX
			CMP EDX, EAX
			CMOVG EAX, T
			CMOVLE EAX, F
			TEST EAX, -1
			JE @L0
			MOV EAX, X
			MOV GREATER, EAX
			JMP @L1
			@L0:
			MOV EAX, Y
			MOV GREATER, EAX
			@L1:
			Place-holder for epilog		

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