

GAS	MASM	NASM
<pre> .extern _printfloat .extern _printfdouble  .data value: .float 1.2  .bss .lcomm r_value, 4 .lcomm f_result, 4 .lcomm d_result, 8  .text .global _asmMain _asmMain: pushq %rbp movq %rsp, %rbp  finit fldpi fld value(%rip) fadd ST(1), %st fstps d_result(%rip) fstps f_result(%rip), %xmm0 </pre>	<pre> extrn ExitProcess, _printfloat, _printfdouble extrn _printfloat, _printfdouble  .data value REAL4 1.2 r_value REAL4 ? f_result REAL ? d_result REAL8 ?  .code _asmMain PROC push rbp sub rsp, 20h lea rbp, [rsp+20h]  finit fldpi fld value fadd ST(1), ST(0) fist r_value  fstp f_result movss xmm0, f_result _asmMain ENDP </pre>	<pre> .extern _printfloat .extern _printfdouble  section .data value: dd 1.2  section .bss r_value resd 4 f_result resd 4 d_result resq 8  section .text global _asmMain _asmMain: push rbp mov rbp, rsp  finit fldpi fld DWORD [value] fadd ST0, ST1 fist DWORD [r_value]  fstp DWORD [f_result] movss xmm0, DWORD [f_result] </pre>

Assembly Programming and  
 Computer Architecture  
 for Software Engineers

Brian R. Hall | Kevin J. Slonka