fact push SR ;save state

push R5

push R6

push R7

mov 10(SP),R5 ;get n

cmp #1,R5

jmp nis1

dec R5 ;R5=n-1

push R5

call fact ;computer n-1!

inc R5 ;R5 now n

pop R6 ;n-1 fact to R6

push R5

push R6

call shmult ;on rtn stack has null/res

pop R7

pop R7

jmp cont

nis1 mov #1,R7

cont mov R7,10(SP) ;n! to return loc

pop R7 ;clean up things

pop R6

pop R5

pop SR

rtn