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