

```
MOV     r0,#9
MOV     r3,r0
MOV     r5,r0
BL      Faculty
Faculty:
STMFD   SP!,{r4,lr}
CMP     r5,#0
BEQ     Finish
CMP     r4,#1
BEQ     LReturn
SUB     r4,r0,#1
SUB     r0,r0,#1
BL      Faculty
MUL     r3,r4,r3
BAL     LReturn
LReturn:
MOV     r0,r3
SUB     r5,r5,#1
LDMFD   SP!,{r4,PC}
Finish:
MOV     r1,r0
MOV     r0,#1
SWI     0x6b
SWI     0x11
.end
```