

AREA power, CODE, READONLY

ENTRY
Main ADR sp,Stack
MOV r0,#4
STR r0,[sp,#-4]!
BL Func
LDR r1,[sp],#4
STR r1, result

Loop B Loop

Func STMDB sp!,{fp,lr,r1-r3}
MOV fp,sp
LDR r2,[fp,#20]
SUB sp,sp,#4
TST r2, #0x1
BLNE Odd
CMP r2,#0x0
BLNE Even
MOV r2,#1
STR r2,[fp,#20]
ADD sp,sp,#4
LDMIA sp!,{fp,pc,r1-r3}

Odd LDR r1,base
SUB r2,r2,#1
STR r2,[fp,#-4]
BL Func
LDR r2,[fp,#-4]
MUL r3,r2,r1
STR r3,[fp,#20]
ADD sp,sp,#4
LDMIA sp!,{fp,pc,r1-r3}

Even LSR r2, #1
STR r2,[fp,#-4]
BL Func
LDR r2,[fp,#-4]
MUL r3,r2,r2
STR r3,[fp,#20]
ADD sp,sp,#4
LDMIA sp!,{fp,pc,r1-r3}

Stack
result
base
AREA power, DATA, READONLY
SPACE 0x100
DCD 0x0000
DCD 0x0000
DCD 0x0002
END

N value	Number of stacks
0	1
1	2
2	3
3	4
4	4
5	5
6	5
7	6
8	5
9	6
10	6
11	7
12	6

