ARM64 Conditional Branching

NZCV flags

Negative ---------- signed result is negative

Zero ---------- result is 0

Carry ---------- add op ➜ overflow
sub op doesn't borrow
last bit shifted out when shifting

o**V**erflow --- add/sub op ➜ signed overflow

Branch conditional codes

B.{condition}

	N	Z	C	V	
MI	1	–	–	–	negative
PL	0	–	–	–	positive/zero
EQ	–	1	–	–	equal
NE	–	0	–	–	not equal
VS	–	–	–	1	overflow
VC	–	–	–	0	no overflow
CS/HS	–	–	1	–	unsigned >=
CC/LO	–	–	0	–	unsigned <
HI	–	0	1	–	unsigned >
LS	–	1*	0*	–	unsigned <=
GE	=	–	–	=	signed >=
LT	≠	–	–	≠	signed <
GT	=	0	–	=	signed >
LE	≠*	1*	–	≠*	signed <=
AL	–	–	–	–	always

Flag states
1 flag set
0 flag clear
– ignored
= flags the same
≠ flags different
* either/both can be met

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