

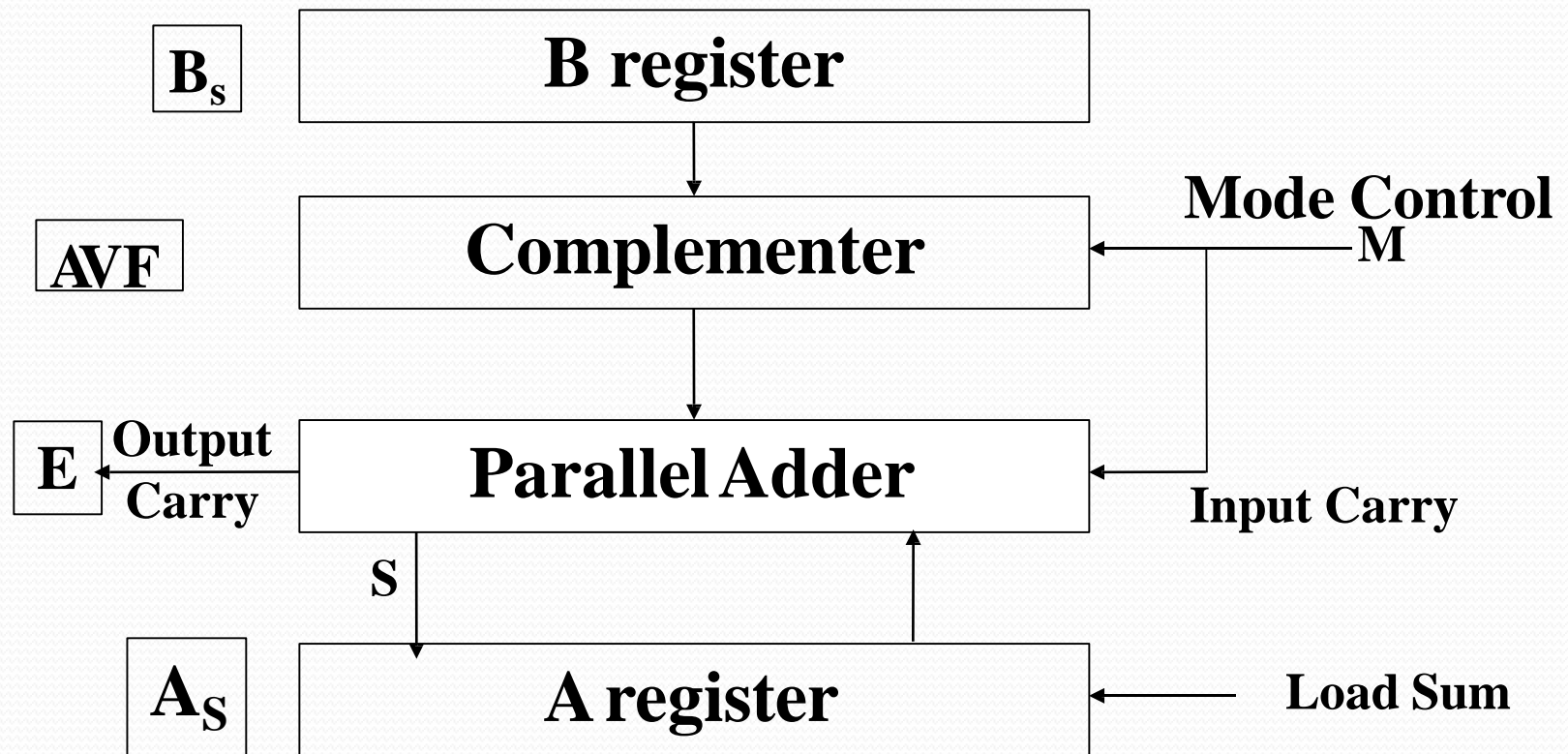
COMPUTER ARITHMETIC

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COMPUTER ARITHMETIC

- Arithmetic means the operation with operand.
 - Like
 - **ADDITION (+)**
 - **SUBTRACTION (-)**
 - **MULTIPLICATION (*)**
 - **DIVIDE (/)**

Hardware for signed-magnitude addition and subtraction



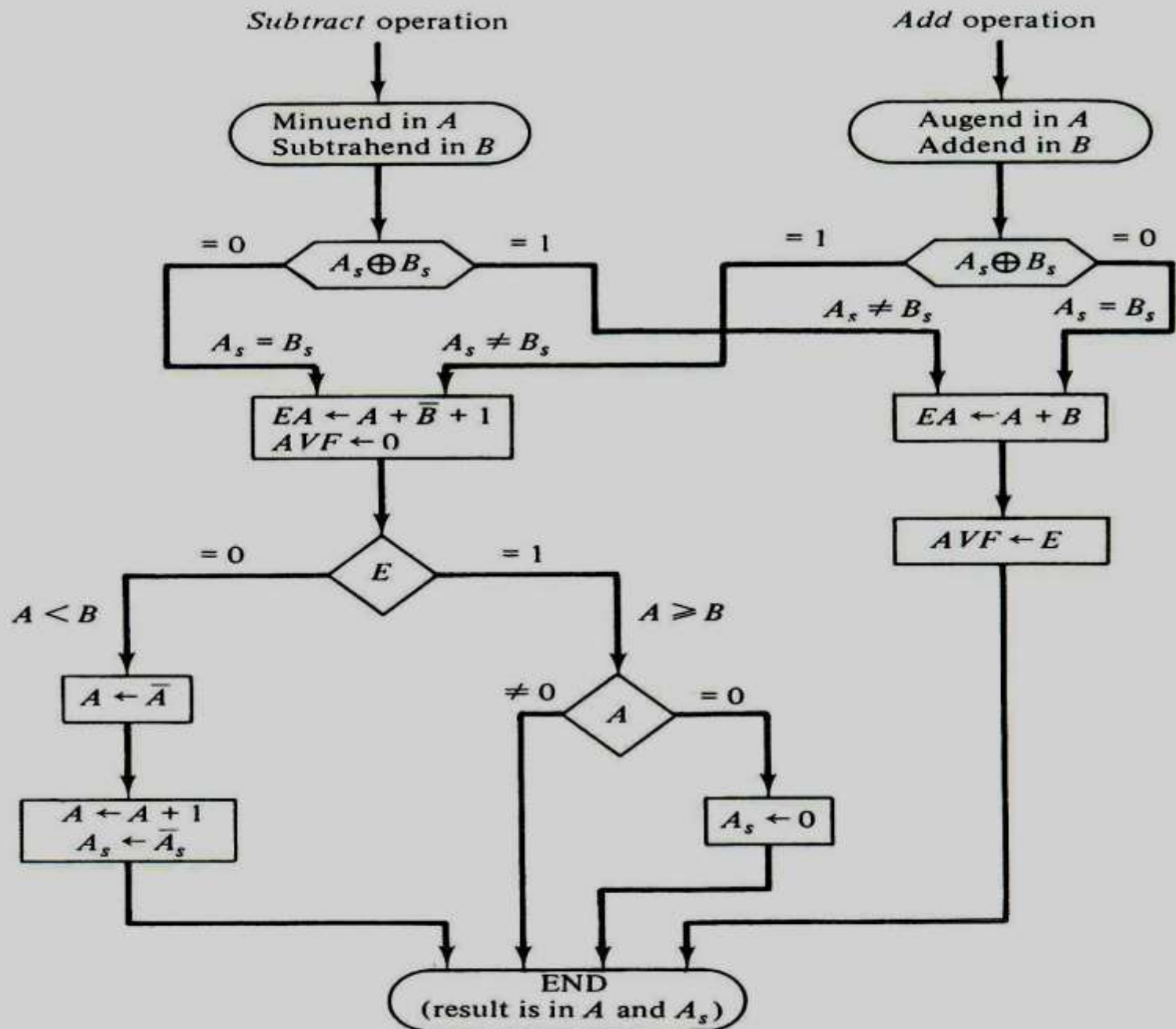
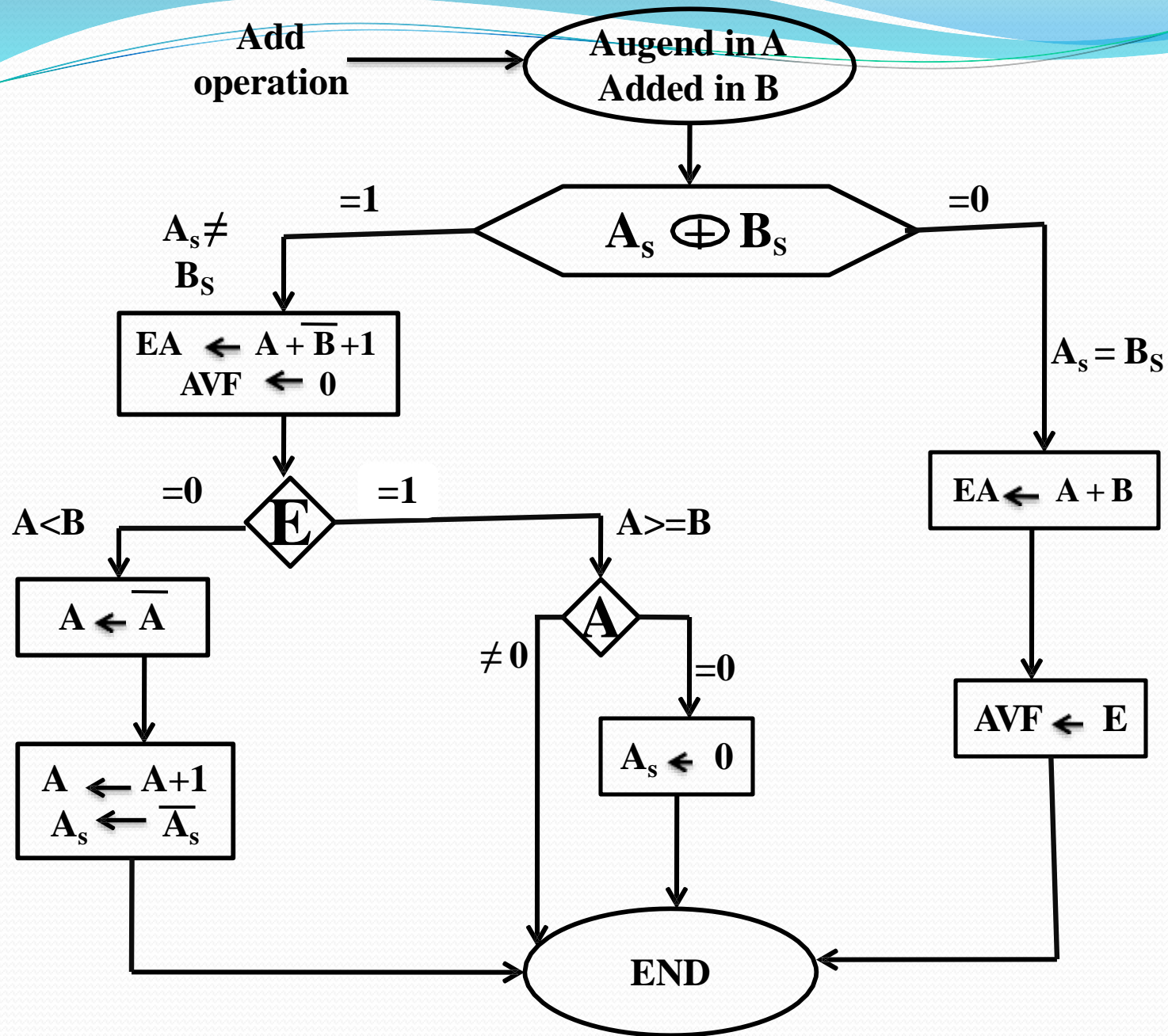
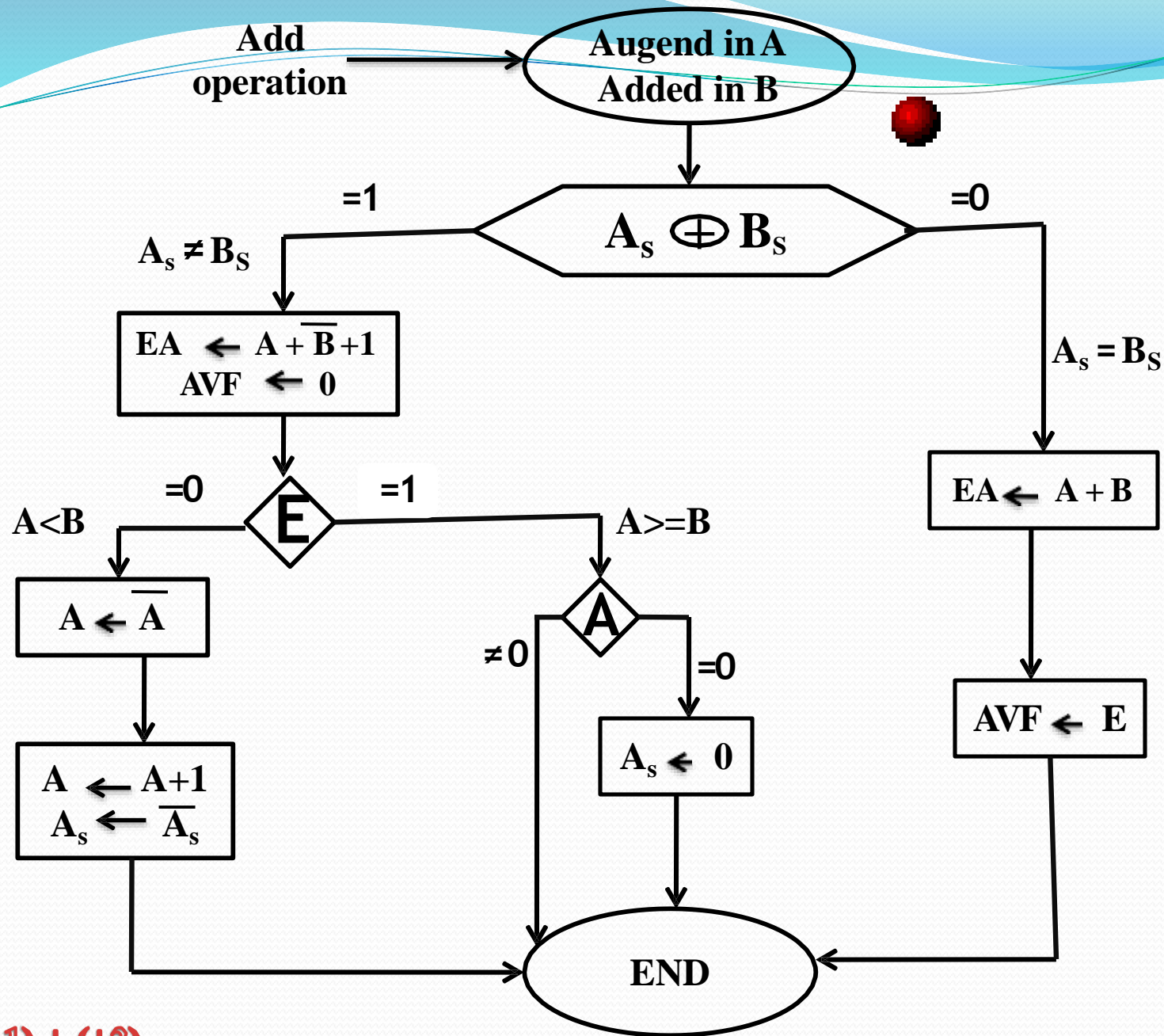


Figure 10-2 Flowchart for add and subtract operations.



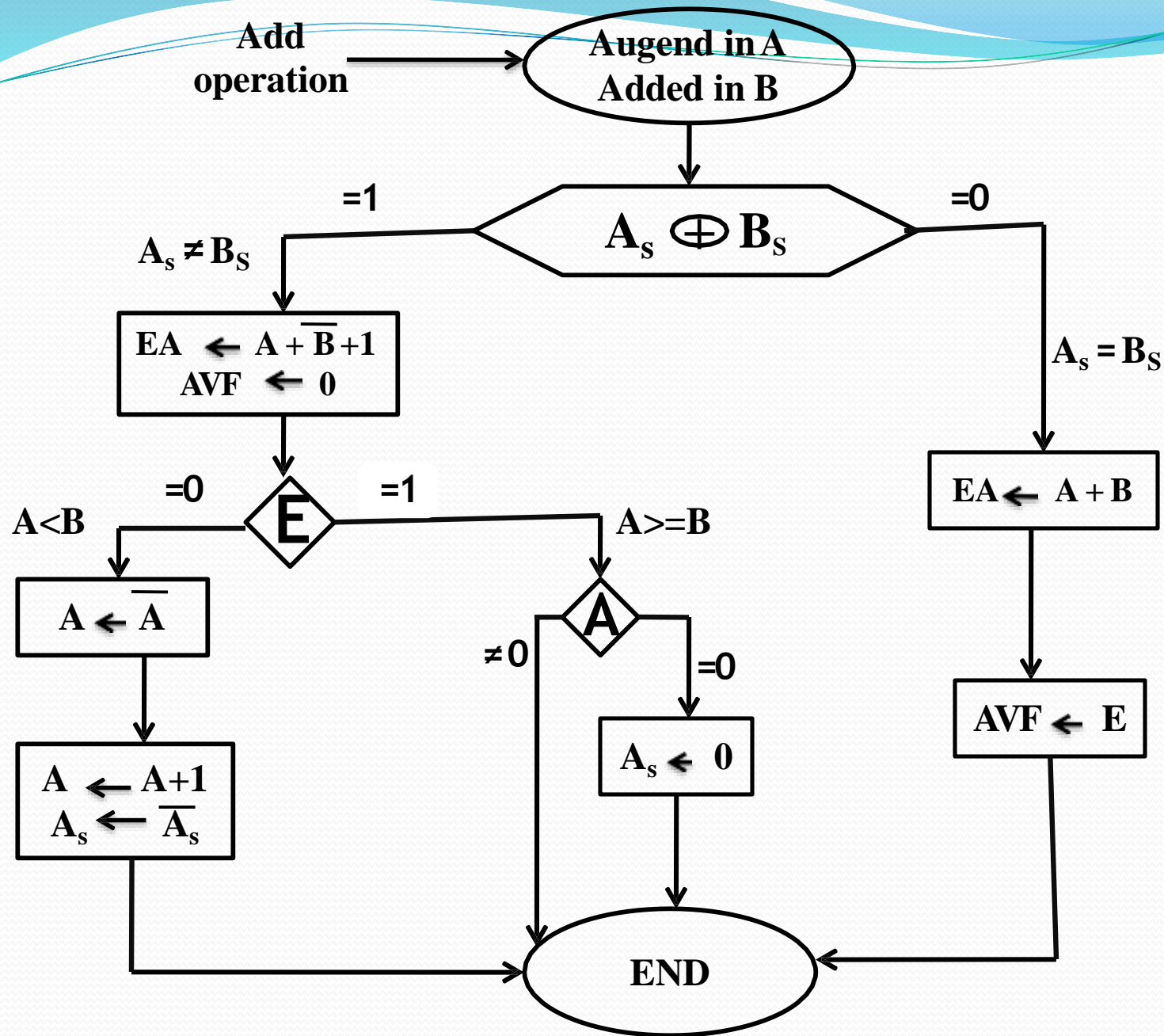
- For Example of **Addition**

- $(+1) + (+2)$
 $(+A) + (+B)$



(+1) + (+2)

- $(-1) + (+2)$
 $(-A) + (+B)$



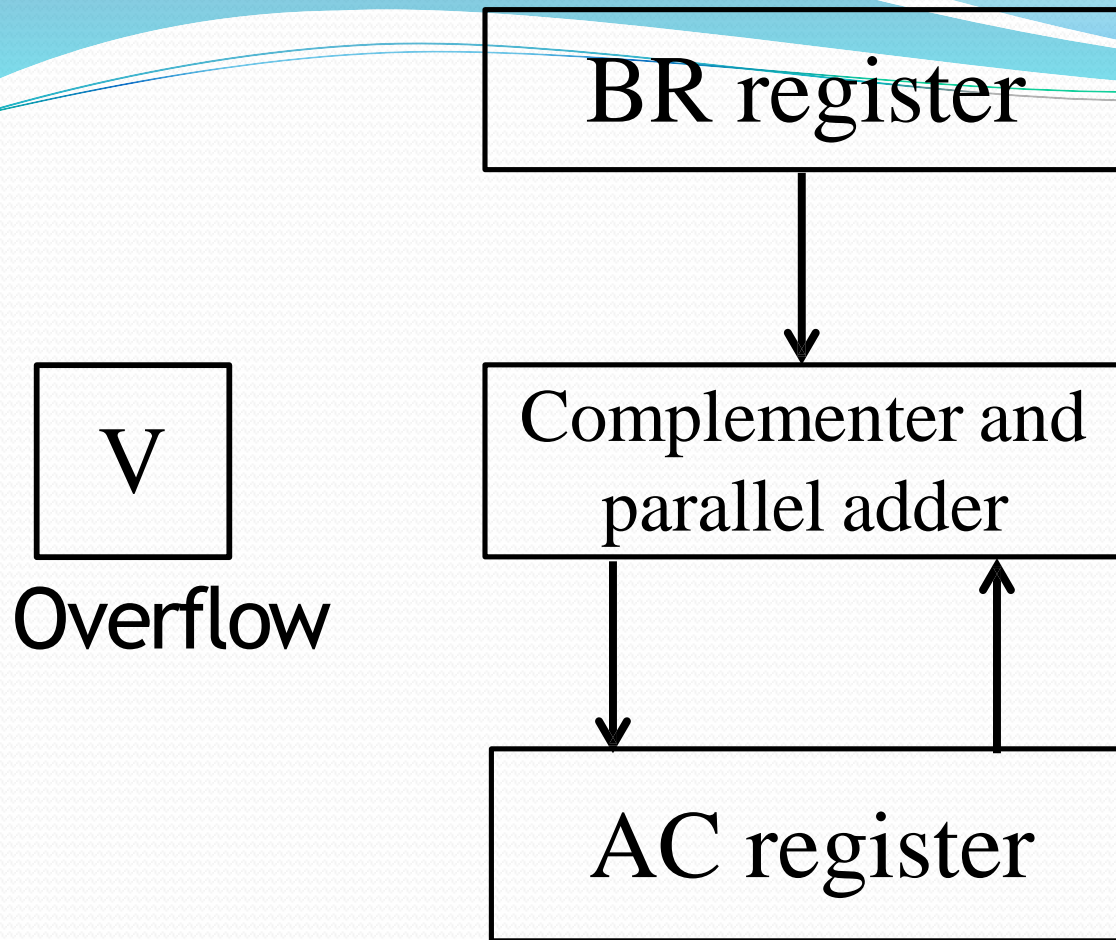


Figure: Hardware for signed-2's complement addition and subtraction.

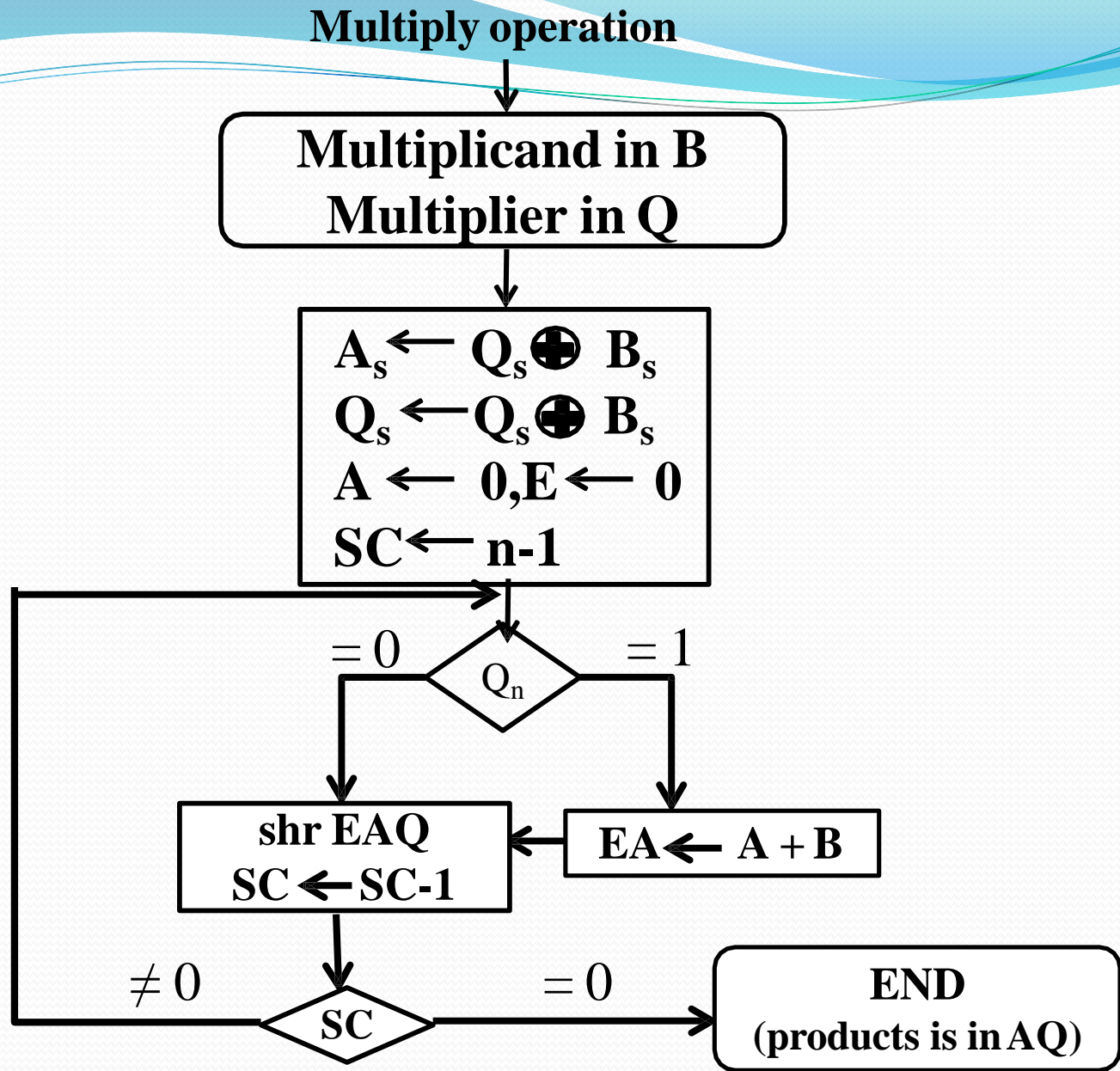


Figure: Flowchart for multiply operation.



- **THANK YOU**