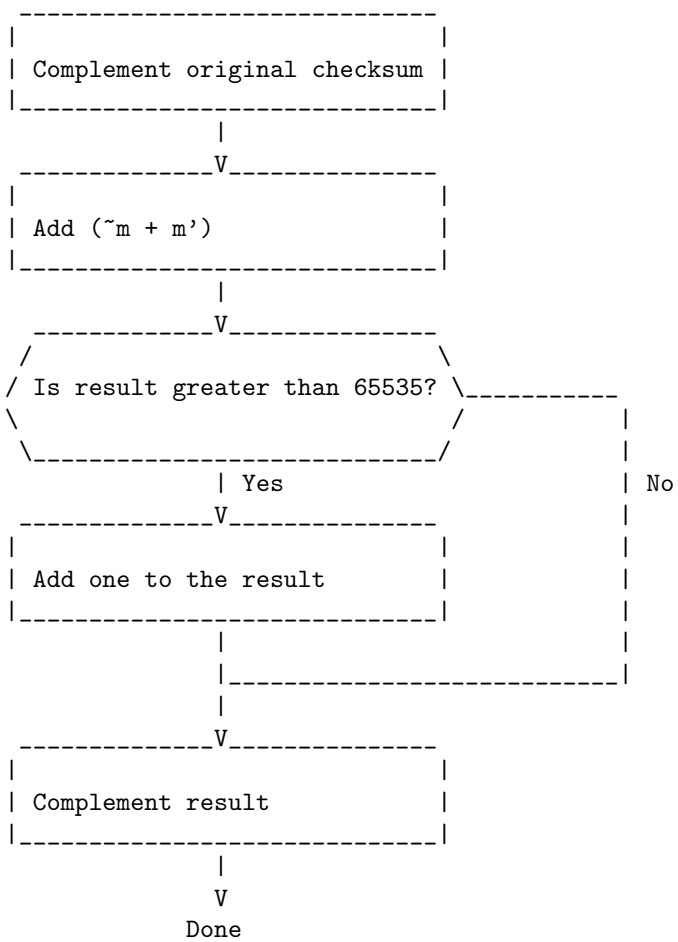
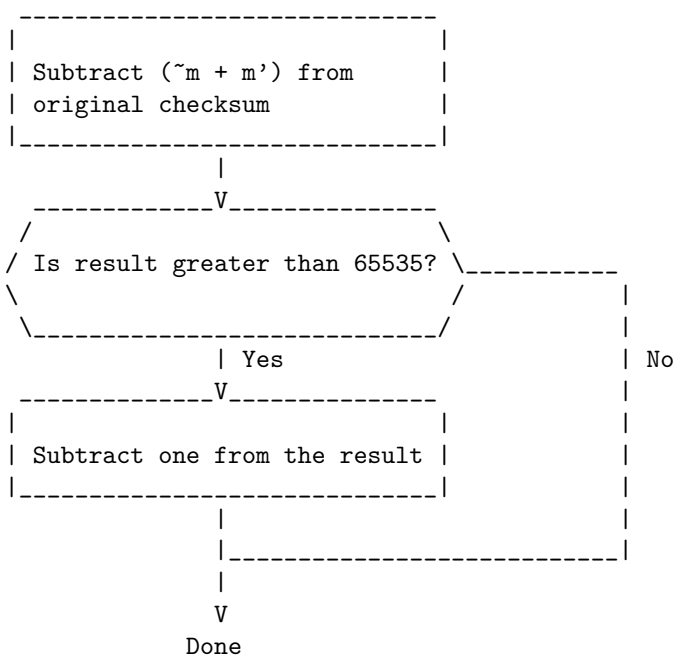
Flow charts for IP and TCP checksum update.

RFC 1624 uses ~m + m' to represent the difference of header values,
where m is the original value and m' is the new value.

Flow chart for RFC 1624 logic:



Flow chart for invention:



Note that the invention saves two complements by using subtraction instead of addition.

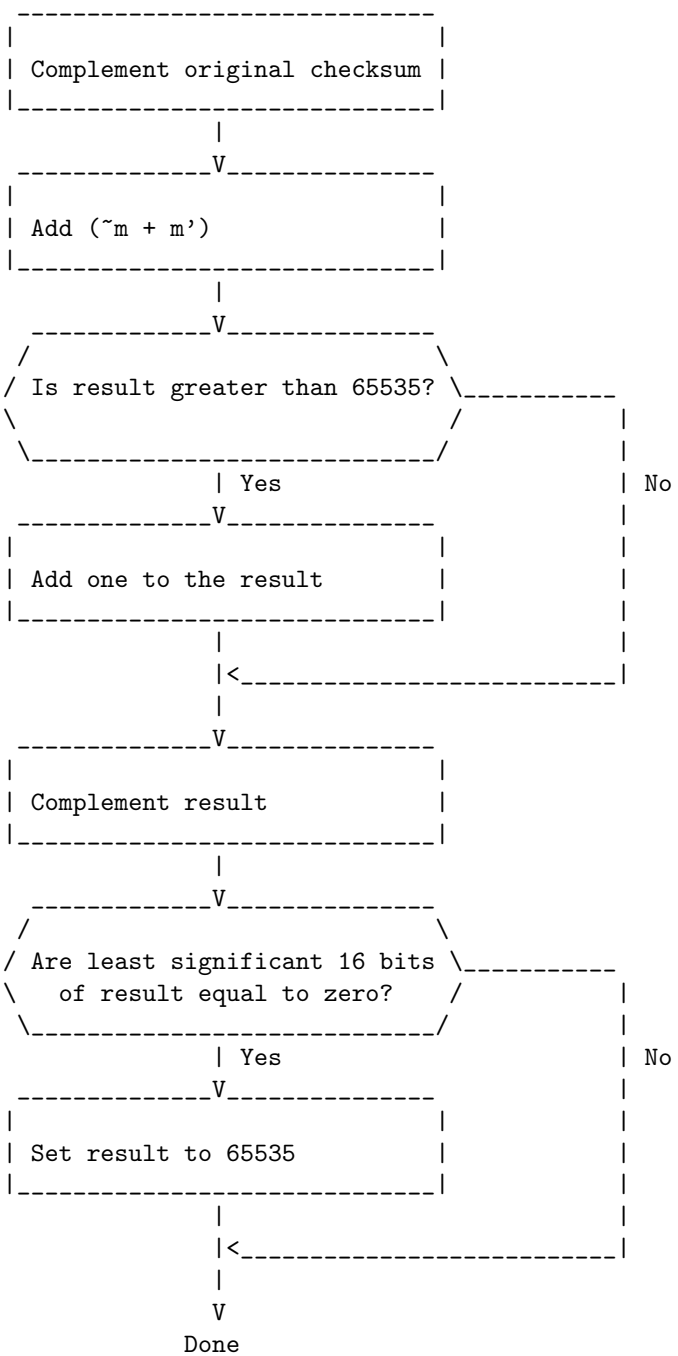
This is not an obvious idea.

If it were obvious, it would be in RFC 1624.

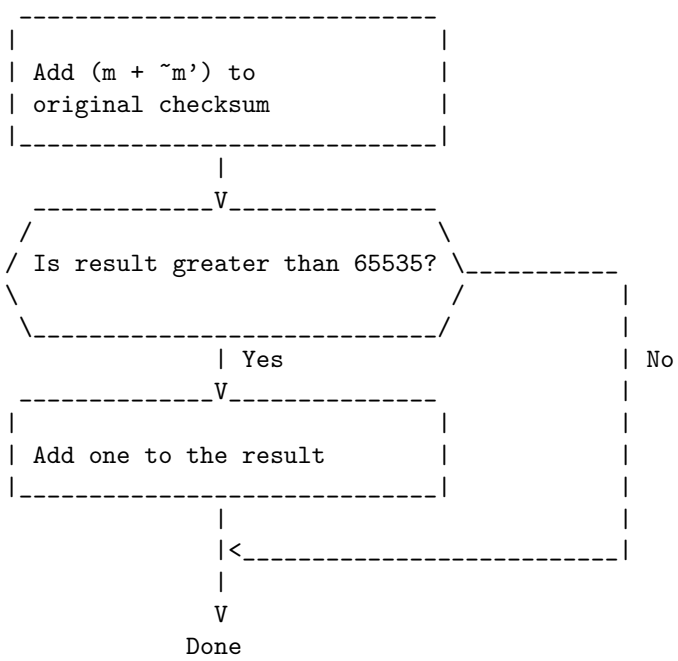
Flow charts for UDP checksum update.

RFC 1624 uses ~m + m' to represent the difference of header values,
where m is the original value and m' is the new value.

Flow chart for RFC 1624 logic:



Flow chart for invention:



Note that the invention saves two complements and the test for zero.

It does this by adding (m + ~m') instead of (~m + m').