

Check												
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Q3: Suppose an 8-bit data word stored in memory is 11100010. Using the Hamming algorithm, determine what check bits would be stored in memory with the data word. Show how you got your answer.

Position	12	11	10	9	8	7	6	5	4	3	2	1
Position in binary												
Data												
Check												

- Detect the error position if the key of the previous data was 0010 and write the data after correction
- How many check bits are needed if the Hamming error correction code is used to detect single bit errors in a 256-bit data word? Show how you get your result.

Q4: For the 8-bit word 00111001, the check bits stored with it would be 0111.

Suppose when the word is read from memory, the check bits are calculated to be 1101. What is the data word that was read from memory?

Q5: How many check bits are needed if the Hamming error correction code is used to detect single bit errors in a 1024-bit data word?