

Longest Sequence of 1 after flipping a bit

1. What is the maximum length of the longest sequence of 1's that can be achieved by flipping one bit in the binary sequence "110111011"?

- 3
- 4
- 5
- 6

Ans: 4

2. what is the time complexity of longest sequence of 1's after flipping a bit

- $O(n)$
- $O(n*n)$
- $O(\log n)$
- $O(\log(\log n))$

Ans: $O(n)$

3. What is the maximum length of the longest sequence of 1's that can be achieved by flipping one bit in the binary sequence "10011110010"?

- 3
- 4
- 5
- 6

Ans: 6

4. What is the maximum length of the longest sequence of 1's that can be achieved by flipping one bit in the binary sequence "1111100010"?

- 5
- 6
- 7
- 8

Ans: 7

5. what is the space complexity of longest sequence of 1's after flipping a bit

- $O(n)$
- $O(1)$
- $O(2)$
- $O(n*n)$

Ans: $O(1)$

6. What is the maximum length of the longest sequence of 1's that can be achieved by flipping one bit in the binary sequence "10100011110"?

- 3
- 4
- 5
- 6

Ans: 5

7. What is the maximum length of the longest sequence of 1's that can be achieved by flipping one bit in the binary sequence "1100101101100010"?

- 10
- 9
- 8
- 7

Ans: 7

8. In computer science, what is the term used to describe the process of changing a 0 to a 1 or vice versa?

- **Flipping**
- Toggling
- Inverting
- Reversing

Ans: Flipping

9. Which of the following statements is true regarding the longest sequence of 1's after flipping a bit?

- Flipping any bit in a sequence of 1's will always increase the length of the sequence.
- **Flipping any bit in a sequence of 1's may increase or decrease the length of the sequence.**
- Flipping any bit in a sequence of 1's will always decrease the length of the sequence.
- Flipping any bit in a sequence of 1's has no effect on the length of the sequence.

Ans: Flipping any bit in a sequence of 1's may increase or decrease the length of the sequence.

10. What is the maximum possible length of a sequence of 1's after flipping exactly one bit in a binary sequence of length N ?

- $N-1$
- N
- **$N+1$**
- $N+2$ gths

Ans: $N+1$