

1. A measure for the complexity of an algorithm at large value of  $N$
2.  $O(100)$
3.  $O(n^2 + 100)$
4. Classical algorithm complexity:  $O(n^2)$ , Quantum algorithm complexity:  $O(2n + 1000)$
5. Shor's algorithm
6. X gate and CNot gate
7. Deutsch - Nösz algorithm