Algorithms:

1. Make sure you can formulate design and implement basic algorithms.

https://www.hackerrank.com/challenges/mini-max-sum/problem https://www.hackerrank.com/challenges/birthday-cake-candles/problem https://www.hackerrank.com/challenges/compare-the-triplets/problem

2. Learn about writing practical algorithms involving games.

https://www.hackerrank.com/challenges/queens-attack-2/problemhttps://www.hackerrank.com/challenges/two-pluses/problemhttps://www.hackerrank.com/challenges/bomber-man/problemhttps://www.hackerrank.co

3. Algorithms based on Strings.

https://www.hackerrank.com/challenges/richie-rich/problem https://www.hackerrank.com/challenges/common-child/problem https://www.hackerrank.com/challenges/string-function-calculation/problem

4. Sorting algorithms.

https://www.hackerrank.com/challenges/countingsort2/problem https://www.hackerrank.com/challenges/fraudulent-activity-notifications/problem https://www.hackerrank.com/challenges/lilys-homework/problem

5. Searching algorithms.

https://www.hackerrank.com/challenges/sherlock-and-array/problem https://www.hackerrank.com/challenges/missing-numbers/problem https://www.hackerrank.com/challenges/gena/problem

6. Graph Algorithms

https://www.hackerrank.com/challenges/bfsshortreach/problem https://www.hackerrank.com/challenges/kruskalmstrsub/problem https://www.hackerrank.com/challenges/primsmstsub/problem

7. Greedy Algorithms

https://www.hackerrank.com/challenges/luck-balance/problem https://www.hackerrank.com/challenges/greedy-florist/problem https://www.hackerrank.com/challenges/board-cutting/problem

8. Dynamic Programming.

https://www.hackerrank.com/challenges/kingdom-division/problem https://www.hackerrank.com/challenges/fibonacci-modified/problem https://www.hackerrank.com/challenges/choosing-white-balls/problem

9. Constructive Algorithms.

https://www.hackerrank.com/challenges/lena-sort/problem https://www.hackerrank.com/challenges/new-year-chaos/problem https://www.hackerrank.com/challenges/flipping-the-matrix/problem

10. Bit manipulation.

https://www.hackerrank.com/challenges/maximizing-xor/problem https://www.hackerrank.com/challenges/sansa-and-xor/problem https://www.hackerrank.com/challenges/xor-key/problem

11. Recursion.

https://www.hackerrank.com/challenges/crossword-puzzle/problem https://www.hackerrank.com/challenges/password-cracker/problem https://www.hackerrank.com/challenges/k-factorization/problem

12. NP-Complete.

https://www.hackerrank.com/challenges/sams-puzzle/problem https://www.hackerrank.com/challenges/spies-revised/problem https://www.hackerrank.com/challenges/tbsp/problem

Other Sites: https://leetcode.com/ https://www.interviewbit.com/ https://www.codechef.com/