1) Initialize set parameters and generate an initial population of nests:

2) Generate a solution by Levy Flight

3) Calculate the fitness of the solution

4) Compare the new solution with the randomly chosen existing nest (solution).

5) Now if the new solution is more optimal replace the old solution.

6) Once the new solution is ready we repeat the process until we cannot find a better solution.

7) Nests are like the solution space, while eggs are like the solutions.

Study the Algorithm
Implement → wireless N/W

Wireless networks face optimization problems, like maximizing efficiency of resource utilization or signal coverage.

Advantages of using Cuckoo Search in Wireless Networks.

Efficient exploration of large, complex search spaces
Robustness in finding global optima or near-optimal solutions.

It helps in routing optimization to minimize packet loss

Implementation:

1) Channel Assignment optimization - minimize interference
2) Routing optimization - Levy flight explores various routing paths.

Helps in interference management to improve signal quality