# Pre-Screening Test for selecting fearless problem solvers –

# EPAM Recruitment Process

As part of the pre-screening activity, we are assessing on candidates problem-solving skills.

There are two problems to solve in this test. The problems may be solved using any of the data structure and/or algorithm techniques. We would recommend you practice problems in **leetcode**, **hackerrank** or **hackerearth**, so that you can easily qualify for the recruitment process. Please learn the following topics. The candidate can prepare with the following topics to appear the Codility test.

* Data Structures
  + Arrays
  + Linked Lists
  + Doubly Linked Lists
  + Maps
  + Sets
  + Graphs
  + Trees
  + Queues
  + Heaps
  + Disjoint Sets
* **Algorithm Techniques**
  + **Recursion**
  + Divide and Concur
  + **Greedy Method**
  + **Backtracking**
  + **Dynamic Programming**
  + Union Find
* Sorting Algorithms
  + Bucket Sort or Radix Sort
  + Bubble sorting
  + Merge Sort
  + Select Sort
  + Quick Sort
* String Algorithms
  + **Pattern Searching Algorithms**
  + String Matching Algorithms
  + **Palindrome Check**
  + String Transformations
  + Regular Expression
  + LCS
* Searching Algorithms
  + Linear Search
  + **Binary Search**
  + Jump Search
  + Interpolation Search
  + **Exponential Search**
  + **Tree-Based Search**
  + **Hash-Based Search**
  + Trie Search
* **Graph and Tree Traversal Algorithms**
  + **DFS**
  + **BFS**
  + **Shortest Path Algorithms**
  + Minimum Spanning Tree Algorithms
  + **Connectivity Algorithms**
  + Topological Sorting
  + **Cycle Detection**