10 different algorithms across various problem domains.

Later, you can implement these algorithms in Python. Here are the algorithm descriptions:

1. **Bubble Sort:**
   * Bubble Sort is a simple sorting algorithm that repeatedly steps through the list to be sorted, compares adjacent elements, and swaps them if they are in the wrong order.
2. **Quick Sort:**
   * Quick Sort is a highly efficient, divide-and-conquer sorting algorithm. It works by selecting a 'pivot' element from the array and partitioning the other elements into two sub-arrays, according to whether they are less than or greater than the pivot.
3. **Binary Search:**
   * Binary Search is an efficient search algorithm used to locate a specific item within a sorted array. It works by repeatedly dividing the search interval in half.
4. **Dijkstra's Algorithm:**
   * Dijkstra's Algorithm is used to find the shortest path between nodes in a graph. It is particularly useful in navigation and network routing.
5. **Depth-First Search (DFS):**
   * DFS is an algorithm for traversing or searching tree or graph data structures. It explores as far as possible along a branch before backtracking.
6. **Breadth-First Search (BFS):**
   * BFS is another graph traversal algorithm that explores all the vertices of a graph in breadthward motion. It is often used for finding the shortest path in unweighted graphs.
7. **Merge Sort:**
   * Merge Sort is a divide-and-conquer algorithm that divides an unsorted list into several sub-lists, sorts each sub-list, and then merges them to produce a sorted list.
8. **Greedy Knapsack Algorithm:**
   * The Greedy Knapsack Algorithm is used to solve the 0/1 Knapsack Problem, where you need to select a combination of items with maximum value, considering a constraint on the total weight.
9. **Fibonacci Sequence Generation (Dynamic Programming):**
   * This algorithm uses dynamic programming to efficiently compute Fibonacci numbers. It avoids redundant calculations by storing and reusing previously computed values.
10. **Prim's Minimum Spanning Tree Algorithm:**
    * Prim's algorithm is used to find the minimum spanning tree in a weighted, connected graph. It selects the edge with the minimum weight and gradually builds the minimum spanning tree.

These algorithms represent a diverse set of problem-solving techniques, and implementing them in Python can be an excellent way to deepen your understanding of algorithm design and analysis. If you'd like, I can provide Python code for any specific algorithm from the list above to get you started.