What is graph traversal?

- Depth-first search: A depth-first search (DFS) is an algorithm for traversing a finite graph. DFS visits the child vertices before visiting the sibling vertices; that is, it traverses the depth of any particular path before exploring its breadth. A stack (often the program's call stack via recursion) is generally used when implementing the algorithm.
  The algorithm begins with a chosen "root" vertex; it then iteratively transitions from the current vertex to an adjacent, unvisited vertex, until it can no longer find an unexplored vertex to transition to from its current location. The algorithm then backtracks along previously visited vertices, until it finds a vertex connected to yet more uncharted territory. It will then proceed down the new path as it had before, backtracking as it encounters dead-ends, and ending only when the algorithm has backtracked past the original "root" vertex from the very first step.
- Breadth-first search: A breadth-first search (BFS) is another technique for traversing a finite graph. BFS visits the sibling vertices before visiting the child vertices, and a queue is used in the search process. This algorithm is often used to find the shortest path from one vertex to another.
- Graphs and its traversal algorithms (tutorialspoint.com)

If a hash function assigns the same location to two elements, what is the solution?

- Separate chaining is one of the most commonly used collision resolution techniques. It is usually implemented using linked lists. In separate chaining, each element of the hash table is a linked list. To store an element in the hash table you must insert it into a specific linked list. If there is any collision (i.e. two different elements have same hash value) then store both the elements in the same linked list.

What is a lambda expression, provide an example?

- Lambda expressions in C++ | Microsoft Learn
- A lambda expression is a short block of code which takes in parameters and returns a value. Lambda expressions are similar to methods, but they do

not need a name and they can be implemented right in the body of a method.

What is code refactoring?

- Code refactoring is defined as the process of restructuring computer code without changing or adding to its external behavior and functionality.
- To make code understand, readable and maintenance.