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In this experiment we implemented Djikstra's and Bellman Ford's algorithm in C.

Dijkstra's Algorithm may fail with negative weight edges and cycles. It has less overheads and can be implemented in a distributed way. Its time complexity is O(E logV), and it uses a greedy approach. It is less time consuming than Bellman Ford's algorithm and more scalable.

Bellman Ford works with negative weight edges and detects negative weight cycles, but is slower with a time complexity of O(VE) and is not easily implemented in a distributed way. It uses a Dynamic Programming approach and has more overheads and less scalability compared to Dijkstra's Algorithm, which only works with non-negative weight edges but is faster with a time complexity of O(E logV), uses a greedy approach, and has less overhead and more scalability.

In conclusion, Dijkstra's algorithm is fast and scalable for non-negative edge weight graphs, while Bellman Ford's algorithm handles negative edge weights and cycles, but is slower and less scalable.