Textual Description

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Idea of approach

Based on the existed three methods: BFS, DFS and Recursive, we can clearly see that the DFS method uses the least time in single thread. Therefore, I choose DFS method to implement the multithread method. The idea of implementation is to use thread pool and put each task into thread pool and get the result of that.

pseudo-code

ExecutorService threadPool = Executors.newFixedThreadPool(the number of available thread workers);

List<Callable<List<Direction>>> tasks = new …;

Try{

   Choice StartPoint = get from maze.getStart();

    While(startPoint is existed){

    Put the task into thread pool.

}

}catch(SolutionFound e){

  Print("Get solution")

}

// get the solution, if existed then return list, if the solution is null then return null.