```java
// Scenario 1 k-hop Neighbourhoods
// We added these commands in switch statement in processOperations method in
RmitCovidModelling.java while we are generating data
// For example, if we evaluate the k-hop neighbourhoods of the graph when k is 3,
// then type "S1 3"




case "S1":
        if (tokens.length == 2) {
                int k = Integer.parseInt(tokens[1]);
                if (k < 0) {
                        printErrorMsg("k should be 0 or greater");
                }
                else {
                        long startTime = System.nanoTime();
                        for(int i = 1; i < graph.getVerticesSize(); i++) {
                                String[] neighbours = graph.kHopNeighbours(k, i);
                                outWriter.println(i + ": " + String.join(" ", neighbours));
                        }
                        long endTime = System.nanoTime();
                        outWriter.println("time taken = " + ((double)(endTime - startTime)) /
Math.pow(10, 9) + " sec");
                }
        }
        else {
                printErrorMsg("incorrect number of tokens.");
        }

        break;
```