Part C

1. **Final Submitted Code**
    a. Question 1:
        i. PartCQuestion-1-disjoint.java
            1. To run: grader_dir/PartCQuestion1-1.sh
        ii. PartCQuestion-1-joint.java
            1. To run: grader_dir/PartCQuestion1-2.sh
    b. Question 2:
        i. PartCQuestion-2.java
            1. To run: grader_dir/PartCQuestion2.sh
            2. This application supports passing in parameter to set allowed lateness
            3. Eg. “flink run -c org.myorg.quickstart.late ~/software/flink-1.3.2/quickstart/target/quickstart-0.1.jar 100”
                a. This will set allowed lateness to be 100 seconds.

2. **Output**
    a. When running each application, the output will be printed to screen, as well as stored in both HDFS:/ and your working directory
    b. To note: before running single application, all previous output from this part will be deleted by default.
    c. But, all sample outputs are also stored in PartC/output/..., eg. C_Q1_disjoint.output

3. Analysis

a. Compare the common windows between allowing lateness with allowed lateness as {30, 60, 100, 500}, and the disjoint results from Question 1

i. To get common windows, a script is provided: PartC/compare.sh, it mainly dose:
“comm -12 <(sort $1) <(sort $2) > $3”

ii. All common windows are stored in /PartC/output/common_windows/..., eg. common_30

iii. Number of common windows:

	Number of Common Windows
30	5
60	23
100	85
500	1037