

Assignment 9: Reservoir Sampling by Vishal Doshi (vdoshi3@uic.edu)

NOTE: The program will generate the input file automatically

Steps:

1. Extract and Import "DecisionTreeJava.zip" into Eclipse.
2. Run the ReservoirSamplingJava.java
3. Provide the size of reservoir

Results:

```
Please provide the size of reservoir:
10
=====Reservoir in the start =====
739    448    90    832    729    278    332    842    192    213
index in begining: 10
index in end:10000
=====Reservoir in the end =====
22     653    979    24     110    726    445    380    834    631
```

Implementation Details:

ReservoirSamplingJava.java: The class where everything is happening. We first create the file on random numbers.

Later we create a reservoir of size provided by user.

And the process of sampling returns the final reservoir with random samples.