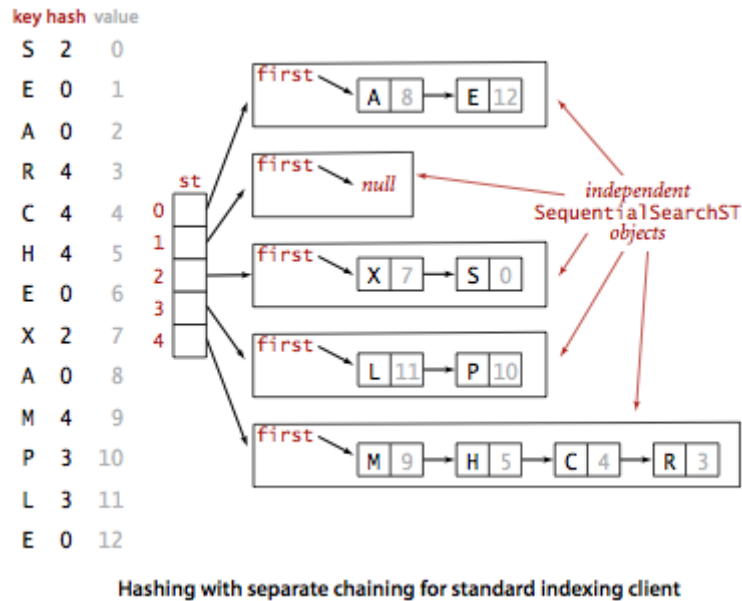


- Write the program for sorting in C/C++ by following the instructions below:

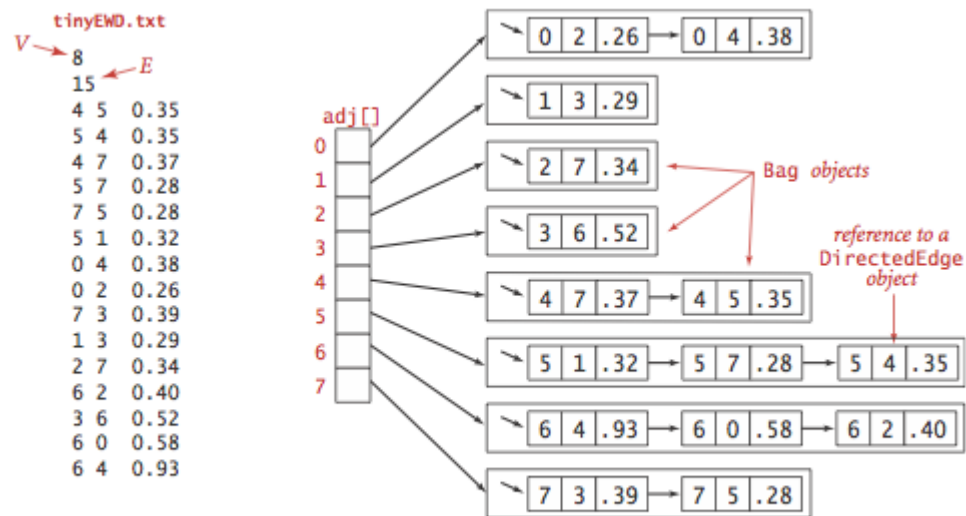
sorted by time	sorted by location (not stable)	sorted by location (stable)
Chicago 09:00:00	Chicago 09:25:52	Chicago 09:00:00
Phoenix 09:00:03	Chicago 09:03:13	Chicago 09:00:59
Houston 09:00:13	Chicago 09:21:05	Chicago 09:03:13
Chicago 09:00:59	Chicago 09:19:46	Chicago 09:19:32
Houston 09:01:10	Chicago 09:19:32	Chicago 09:19:46
Chicago 09:03:13	Chicago 09:00:00	Chicago 09:21:05
Seattle 09:10:11	Chicago 09:35:21	Chicago 09:25:52
Seattle 09:10:25	Chicago 09:00:59	Chicago 09:35:21
Phoenix 09:14:25	Houston 09:01:10	Houston 09:00:13
Chicago 09:19:32	Houston 09:00:13	Houston 09:01:10
Chicago 09:19:46	Phoenix 09:37:44	Phoenix 09:00:03
Chicago 09:21:05	Phoenix 09:14:25	Phoenix 09:14:25
Seattle 09:22:43	Phoenix 09:10:25	Phoenix 09:37:44
Seattle 09:22:54	Seattle 09:10:25	Seattle 09:10:11
Chicago 09:25:52	Seattle 09:36:14	Seattle 09:10:25
Chicago 09:35:21	Seattle 09:22:43	Seattle 09:22:43
Seattle 09:36:14	Seattle 09:10:11	Seattle 09:22:54
Phoenix 09:37:44	Seattle 09:22:54	Seattle 09:36:14

Stability when sorting on a second key

- Write down the program for searching in C/C++ by following the instructions below:



3. Write down the program for hash-table based on using C/C++ by following the instructions below:



Edge-weighted digraph representation

4. Write down the program for reading the file below:

```

It was the best of times,
it was the worst of times,
it was the age of wisdom,
it was the age of foolishness,

age 3-4
best 1
foolishness 4
it 1-4
of 1-4
the 1-4
times 1-2
was 1-4
wisdom 4
worst 2

```