

Sample question1:

Assume a file named “pop” containing the population info about states:

Region code:

1 for Northeast

2 for Midwest

3 for South

4 for West

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3,Alabama,4822023
4,Alaska,731449
4,Arizona,6553255
3,Arkansas,2949131
4,California,38041430
4,Colorado,5187582
1,Connecticut,3590347
3,Delaware,917092
3,District of Columbia,632323
3,Florida,19317568
4,Hawaii,1392313
4,Idaho,1595728
2,Illinois,12875255
2,Indiana,6537334
2,Iowa,3074186
...
...
```

There are 3 fields (region code, state, population) each line separated by comma.

- 1) Sort states by population in descending order. Largest population comes first.
- 2) Remove duplicate records if exists.
- 3) Add one more line "3, Georgia, 9919945" at the beginning of the file using sed
- 4) Remove the line about "Washington" without knowing the line number using sed
- 5) Remove the region info. Output only state and its population each line separated by comma. (awk)
- 6) Calculate the average population of south states.

Sample question2:

Choose all matched strings of the given regular expression. It may have more than one matched.

1) a(bc)+de

- A) abcde B) ade C) abcbcd D) abc

2) a(bc)?de

- A) abcde B) ade C) abcbcd D) abc

3) [a-z\s]*hello

- A) Othello B) hello C) 2hello D) say hello