Cluster params (RAM, CPU cores, number of nodes): n1-standard-2 (2 vCPUs,
7.5 GB memory), 1 master, 2 workers

## Size of the input file:

```
CA.csv -- 62Kb
```

DE.csv -- 61Kb

FR.csv -- 50Kb

GB.csv -- 51Kb

IN.csv -- 58.Kb

JP.csv -- 28Kb

KR.csv -- 34Kb

MX.csv -- 44Kb

RU.csv -- 74Kb

US.csv -- 61Kb

## Size of the resulting data:

```
CA_1-6.json -- (15Kb, 30Kb, 124Kb, 40Kb, 154Kb, 24Kb)
```

DE 1-6.json -- (15Kb, 28Kb, 107Kb, 40Kb, 155Kb, 25Kb)

FR\_1-6.json -- (11Kb, 19Kb, 96Kb, 40Kb, 141Kb, 24Kb)

GB 1-6.json -- (36Kb, 40Kb, 37Kb, 6Kb, 40Kb, 21Kb)

IN 1-6.json -- (19.Kb, 52Kb, 120Kb, 40Kb, 150Kb, 24Kb)

JP\_1-6.json -- (19Kb, 21Kb, 46Kb, 12Kb, 77Kb, 23Kb)

KR 1-6.json -- (19Kb, 27Kb, 77Kb, 16Kb, 141Kb, 27Kb)

MX\_1-6json -- (10Kb, 17Kb, 102Kb, 39Kb, 181Kb, 209Kb)

RU\_1-6.json -- (15Kb, 15Kb, 157Kb, 51Kb, 209Kb, 28Kb)

US 1-6.json -- (33Kb, 29Kb, 54Kb, 11Kb, 67Kb, 22Kb)

## Time of processing for each question in sec:

total 1:56 sec

total\_2: 55 sec

total\_3: 224 sec

total 4: 45 sec

total\_5: 52 sec

total\_6: 50 sec

CA 1 time: 7.416262149810791

CA\_2 time: 4.335566520690918

CA\_4 time: 4.7531304359436035

CA\_3 time: 27.766446828842163

CA 5 time: 4.847712755203247

CA 6 time: 3.9867618083953857

DE\_1 time: 7.492263317108154

DE 2 time: 3.6113460063934326

DE 4 time: 6.9686949253082275

DE 3 time: 36.36558222770691

DE\_5 time: 5.203356504440308

DE\_6 time: 5.910731554031372

FR\_1 time: 5.111824989318848 FR\_2 time: 5.136228322982788 FR\_4 time: 4.243539810180664 FR\_3 time: 28.831607580184937 FR\_5 time: 4.002663612365723 FR\_6 time: 3.4697134494781494

GB\_1 time: 5.885650634765625 GB\_2 time: 5.696737289428711 GB\_4 time: 2.767531156539917 GB\_3 time: 6.660318613052368 GB\_5 time: 6.390847682952881 GB\_6 time: 10.309161901473999

IN\_1 time: 3.7323977947235107 IN\_2 time: 3.4146316051483154 IN\_4 time: 5.25674295425415 IN\_3 time: 16.75927209854126 IN\_5 time: 3.28619384765625 IN\_6 time: 4.659377813339233

JP\_1 time: 5.262760162353516 JP\_2 time: 3.6282317638397217 JP\_4 time: 1.9391071796417236 JP\_3 time: 8.90887713432312 JP\_5 time: 2.883671283721924 JP\_6 time: 2.219302177429199

KR\_1 time: 4.218242883682251 KR\_2 time: 16.980113983154297 KR\_4 time: 5.7085959911346436 KR\_3 time: 9.35180950164795 KR\_5 time: 2.787484884262085 KR\_6 time: 2.4235572814941406

MX\_1 time: 6.356821060180664 MX\_2 time: 6.961262464523315 MX\_4 time: 4.28136134147644 MX\_3 time: 30.514523029327393 MX\_5 time: 8.350579023361206 MX\_6 time: 4.08715295791626

RU\_1 time: 4.556888818740845 RU\_2 time: 5.8692567348480225 RU\_4 time: 6.8059306144714355 RU\_3 time: 48.95071005821228 RU\_5 time: 8.177370548248291 RU\_6 time: 5.1981422901153564

US\_1 time: 7.189659357070923 US\_2 time: 4.459578990936279 US\_4 time: 2.9978325366973877 US\_3 time: 14.6662015914917 US\_5 time: 6.962774038314819 US\_6 time: 3.687997817993164