HIPER Automotive - Data Engineering Final Round Task

To read required data from the PINGS which are json files given in 'dsm_api' folder Objective Populate them in an SQL table (on your local system)

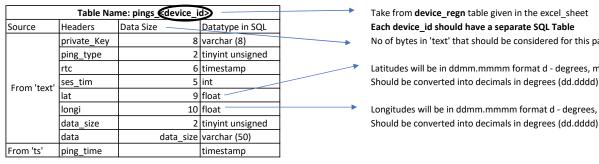
Candidate should submit python script and SQL Table by 29th August 10 AM (Monday)

Description

The below screenshot is data contained in each 'PING' from which data needs to be read and fed into our SQL table Each json file will have several pings. Only pings present in the below format needs to be considered and processed. Other pings should be neglected

```
"bot_id": "B03A48VQV50",
"type": "message",
"cast": "b'U7j69rM2,00,000000,01223,000000000,0000000000,02,10;'",
"user": "U039XK35WBG",
"bs": "1661324408.181259",
                                                                                                                                                                             All data from 'text' needs
                                                                                                                                                                             to be read from this
                                                                                                                                                                              entry, delimited by
                                                                                               ping_time data from 'ts' needs
"app_id": "A03A6JSG3EG",
"team": "TT6N162TE",
                                                                                                                                                                              commas (Neglect b' in
                                                                                               to be read from this entry
                                                                                                                                                                              the beginning)
"beam: "Irentaliz",
"bot_profile": {
    "id": "B03A48VQV50",
    "app_id": "A03A4JSG3EG",
    "name": "HiPER Bot",
    "icons": {
                                                                                                                                                                             Byte locations are
                                                                                                                                                                              mentioned in the Data
                                                                                                                                                                             Size in the below table.
              "image_36": "https:\/\/avatars.slack-edge.com\/2022-04-25\/3434208692195_fa48db363d080393dlbe_36.png",
"image_48": "https:\/\/avatars.slack-edge.com\/2022-04-25\/3434208692195_fa48db363d080393dlbe_48.png",
"image_72": "https:\/\/avatars.slack-edge.com\/2022-04-25\/3434208692195_fa48db363d080393dlbe_72.png"
      },
"deleted": false,
"updated": 1650881011,
"team_id": "TTEN162TE"
 blocks": [
               "type": "rich_text",
               "block_id": "FvE2",
"elements": [
                                             "type": "text",
"text": "b'U7j69rMZ,00,000000,01223,000000000,0000000000,02,10;'"
```

Data present in 'text' and 'ts' needs to be read, decoded and fed into the SQL table, details of which are mentioned below



Take from device_regn table given in the excel_sheet Each device_id should have a separate SQL Table No of bytes in 'text' that should be considered for this parameter

Latitudes will be in ddmm.mmmm format d - degrees, m-minutes.

Longitudes will be in ddmm.mmmm format d - degrees, m-minutes. Should be converted into decimals in degrees (dd.dddd)

SQL Table Structure

| # | Name | Туре | Collation | Attributes | Null | Default | Comments | Extra | Action | | | |
|---|----------------|-------------|-------------------|------------|------|---------|----------|----------------|--------|------|---|------|
| 1 | id 🔑 | int | | | No | None | | AUTO_INCREMENT | Change | Drop | W | More |
| 2 | time_at_server | timestamp | | | No | None | | | Change | Drop | ~ | More |
| 3 | type | tinyint | | | No | None | | | Change | Drop | w | More |
| 4 | rtc | timestamp | | | No | None | | | Change | Drop | v | More |
| 5 | session_time | int | | | No | None | | | Change | Drop | Ψ | More |
| 6 | lat | float | | | No | None | | | Change | Drop | Ψ | More |
| 7 | longi | float | | | No | None | | | Change | Drop | v | More |
| 8 | data_size | tinyint | | | No | None | | | Change | Drop | Y | More |
| 9 | data | varchar(50) | utf8mb4_0900_ai_c | i | No | None | | | Change | Drop | w | More |

FAQs

What if the private key doesn't exist?

Ignore those pings

What if any of the parameter is zero?

Consider them as zero