

Albacross recruitment task

Goal: Decorate provided events with company_id.

- Application in Apache Spark.
- Take into consideration when designing solution that amount of data to handle is big
- You can assume that input data is in right format, skip validation
- Each company has assigned unique priority.
- If multiple companies have overlapping ip ranges -> then overlapping part should be consider as belonging to the company with lower priority.
- If no mapping for ip - leave company_id empty in output
- ensure the code is clean and readable
- upload to github
- provide assumptions made, instructions in the realm
- Input:
 - company_id - ip mapping
 - events
- Output:
 - events decorated with company

Example:

Input

- company_id - ip mapping

```
[
  {
    "company_id": "A",
    "priority": 1432,
    "ips": [
      "195.164.36.1-196.165.37.195",
      "143.1.36.1-143.1.36.195",
      "164.31.23.1-164.31.23.255"
    ]
  },
  {
    "company_id": "B",
    "priority": 14,
    "ips": [
      "164.31.23.1-164.31.23.7"
    ]
  }
]
```
- events

```
[
  {
    "id": "E",
    "ip": "164.31.23.2"
  },
  {
    "id": "X",
    "ip": "11.31.23.2"
  }
]
```

Output

- events decorated with company

```
[
  {
    "id": "E",
    "ip": "164.31.23.2",
    "company_id": "B"
  },
  {
    "id": "X",
    "ip": "11.31.23.2"
  }
]
```