


## PROJECT DEVELOPMENT

Think about a server that have the main goal of create routes based of some deliveries, we had some rules to create a route that are:

- A route need to have at least two deliveries.
- A route is composed by steps, each step is a part of a delivery, for example: We have delivery one with pickup\_1 and delivery\_1 and delivery two with pickup\_2 and delivery\_2. So the steps of the route could be pickup\_1, pickup\_2, delivery\_1, delivery\_2.

So your work as a developer of this amazing company is to create an endpoint to create an optimized route, you have an array of deliveries, each delivery have the following structure:

```
{ id: 1, pickup_location: [23, 45], delivery_location: [23, 56], distance: 7, traffic: 5 }
```

 The pickup and delivery location have the structure [lat, long]. The distance is the amount of kilometers that separates the pickup from the delivery point. The Traffic is a value between 1 and 5, if the value is higher it means that it has more traffic.

The POST endpoint that you are developing receive the following structure:

```
{  
  "maximun_distance": integer,  
  "considerer_traffic": boolean,  
  "plot": boolean,  
  "maximun_distance_between_points": integer  
}
```

The response that you need to send needs to have the following structure

```
{  
  "routeId": integer (generic number is ok),  
  "steps": array [ { point: [lat, long], id: integer }, ..... ]  
}
```

### Deliverable:

- The response and times with the following inputs

```
{ maximun_distance: 1000000, considerer_traffic: true }  
{ maximun_distance: 40, considerer_traffic: false}
```

- **Extra points if you show the response and times with the following input**

```
{  
  maximun_distance: 1000,  
  considerer_traffic: true,  
  plot: true,  
  maximun_distnace_between_points: 5  
}
```

Please upload all your code into We a github repository and share with us the solution.