* **Question 1: Ramadan Camping Challenge**

For choosing a suitable areas, services, customers, and vendors I considered some constrains as follows:

1. First thing that is very important in Ramadan month is noting delivery time especially in near Iftar timings. For this purpose I filtered vendors whose delivery time was more than 10 minutes near Iftar timings
   1. I considered Iftar timings had been between 8 and 9 P.M.
2. Another restriction on vendors applying was their average of selling compare with average of selling in their area. If vendor’s average of selling was less than average of selling in the area, it would have been competent to come up the screen
3. Another restriction same as restriction (2) which is about purchasing power of customers applied on query as well
4. Another thing that I considered was services which customers filtered in restriction (3) liked to buy them. For this purpose I ranked services which was used by customers and choose them that was bought more than once

By combining this filter I recommend customers to order services which customers intend to buy with higher probably. In addition we notice that this order send to vendors which their average of selling was less than their average of selling in the area

* **Question 2: Shoot Out Challenge**

First thing that I interested to examine is the mean and variance of difference between the **First Assign** and **Accepted**.

* Mean of shootout area is 9 minutes and its std. is about 24 minutes
* Mean of regular trip is 4 minutes and its std. is about 12 minutes

It shows that most of bikers do not incline to accept those orders accrued in the shootout area. Considerable another thing is variance. In shootout area is higher than regular area and it shows sometimes some bikers accepted in time that is vary far from 9 minutes that it can be very lower or higher than 9 minutes. We can find those bikers accepted very quickly and use them in the future orders which will accrue in the shootout area.

Second thing that is examined is the mean and std. of difference between the **First Assign** and **Delivered time**. It can show us waiting time which would impose on customers by shootout area.

* Mean of shootout area is 24 minutes and its std. is about 29 minutes
* Mean of regular trip is 17 minutes and its std. is about 16 minutes

Means show that users in shootout area will have bad experience compare with regular area. Also both stds are near of means that it shows there is not major deference’s between bikers accepting request and most of them try deliver foods as soon as possible.

Why do bikers spend more time taking a path in shootout area than spending time doing that in the regular area? Why they reluctant to accept orders in shootout area?

For answer this question we should consider another criterion as follows:

* Distance between restaurant and customers that bikers have to take the path.
  + Mean of shootout area is 1503
  + Mean of regular area is 1418
* Spending time taking a path between restaurant and customer.
  + Mean of shootout area is 10 minutes
  + Mean of regular area is 8 minutes

Although analysis shows mean of distance in shoot area will be increased by 6 percent, time will not be increased by 6 percent! It increased by 20 percent!! What is the problem?

Three reasons that come up to my mind is:

1. Bikers have difficulty finding address during their path
2. Bikers get stuck in traffic because they do not familiar with short cuts that escape from traffic
3. Bikers waste time to find address and apply it in some applications such as wiz or google map