

Download “churn.txt” file from the below given URL address:

<http://ce.sharif.ir/courses/85-86/1/ce925/assignments/files/assignDir2/churn.txt>

This file includes sample dataset from a mobile telecommunication service provider. Each row includes the data of a customer and each attribute is separated with “,” (comma character). The corresponding names of the attributes are declared at the first line of the file. The first two lines of the file are as follows:

```
State,Account Length,Area Code,Phone,Int'l Plan,VMail Plan,...  
KS,128,415,382-4657,no,yes,...
```

The data before the first comma at each row corresponds to the state that customer lives in. The data after the first comma corresponds to the account length of the customer. For example, the first customer lives in KS, his/her account length is 128, his/her area code is 415 and so on.

This telecom company wants to make some analysis with their customer profile so they can offer customers deals depending on the customers’ behaviours. Based on the given dataset try to find the following information:

1. What is the average number of Vmail messages (“VMail Message”) sent by customers who talked more than 100 minutes at nights (“Night Mins”)?
2. “Churn” is an action of changing the current mobile service operator. What is the average number of customer service calls (“CustServ Calls”) made by customers who churned?

Hint:

You can delete the first line of the file since it does not contain any customer data.