1. User Ids Analysis

Evaludate which Id can be used as user Id for future user behavior/usage pattern analysis

User Ids analyzed here are:

- Visitor Id
- Anid
- Puid

Distinct Ids were extracted from library data for 2015/08 - 2015/10.

Anid is the best Id to keep track of users log data across a long time period

For each Id type, check the distribution of duration

Assumption is Puid and Anid should have higher percentage for longer duration; However, the trends do not seem to vary much for each Id type

```
##   Group.1        x
## 1    Anid  7781754
## 2    Puid    32704
## 3 VisitId 51660860
```

Check how many days a Id come back to visit library across 3 month period

More Anid come back more than once and consistenly higher than two other Ids

Percentage By DateCount