Ranking de Clientes - Testing

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Set up Input data tables are:

```
## Loading objects:
##   OPER
##   PERSONAS
##   DIVRA
##   DIVRA4
##   CUENTACORRIENTE
##   COMPMOV
##   OPERICO
```

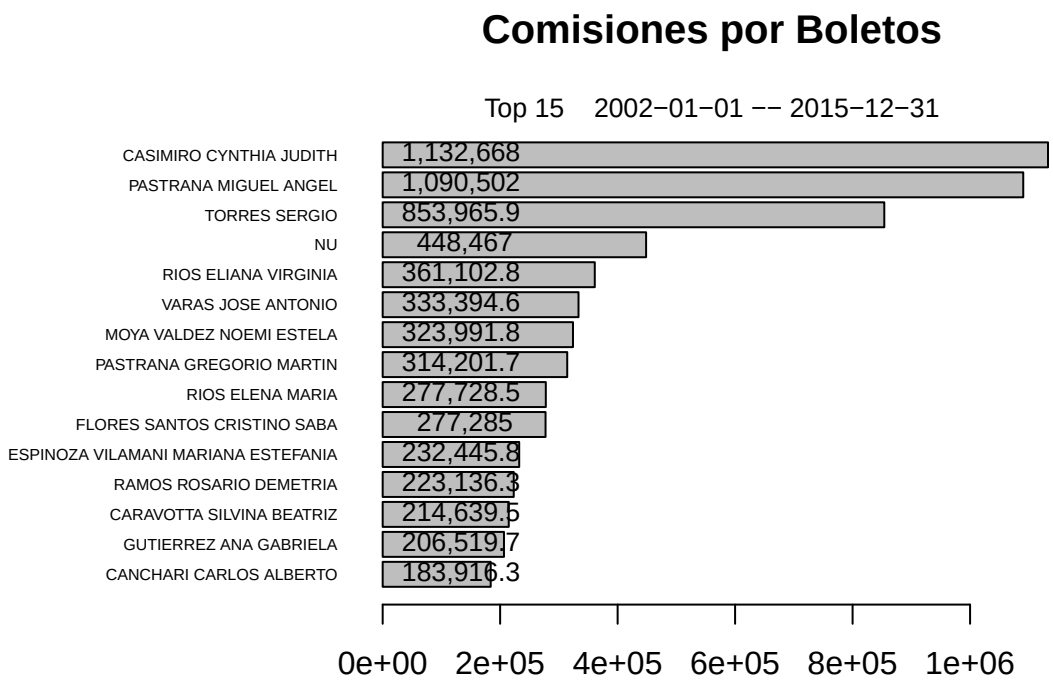
Parameters: Period and number of customers Note that these parameters applies to all tests except for AuM Ranking.

```
## [1] "01-01-2002"
## [1] "31-12-2015"
## [1] 15
```

```
# Filters
Oper <- OPER[OPER$OperFecAnul == '1753-01-01', ]
Oper <- Oper[Oper$OperComiCMonto != 0, ]

# Join tables OPER and PERSONAS
Oper <- Oper[Oper$OperFecCon >= FromDate & Oper$OperFecCon <= ToDate, ]
Comi <- merge(Oper, PERSONAS, by = 'ComiCodigo')
Comi <- Comi[, c('ComiCodigo', 'OperFecCon', 'OperComiCMonto',
                 'PersTitular', 'PersApellido', 'PersNumeroDoc', 'PersPorPar')]

# Compute each person's total comission
Comi$Monto <- Comi$OperComiCMonto * (Comi$PersPorPar / 100)
ComiPers <- aggregate(x = Comi$Monto,
                      by = list(PersApellido = Comi$PersApellido,
                                PersNumeroDoc = Comi$PersNumeroDoc),
                      sum)
names(ComiPers)[3] <- 'Monto'

# Create accumulator to compute Total comissions
TotPers <- ComiPers
```

```
# plot Ranking
plot_TopN(ComiPers, N, 'Comisiones por Boletos')
```

Test Comisiones x Boletos

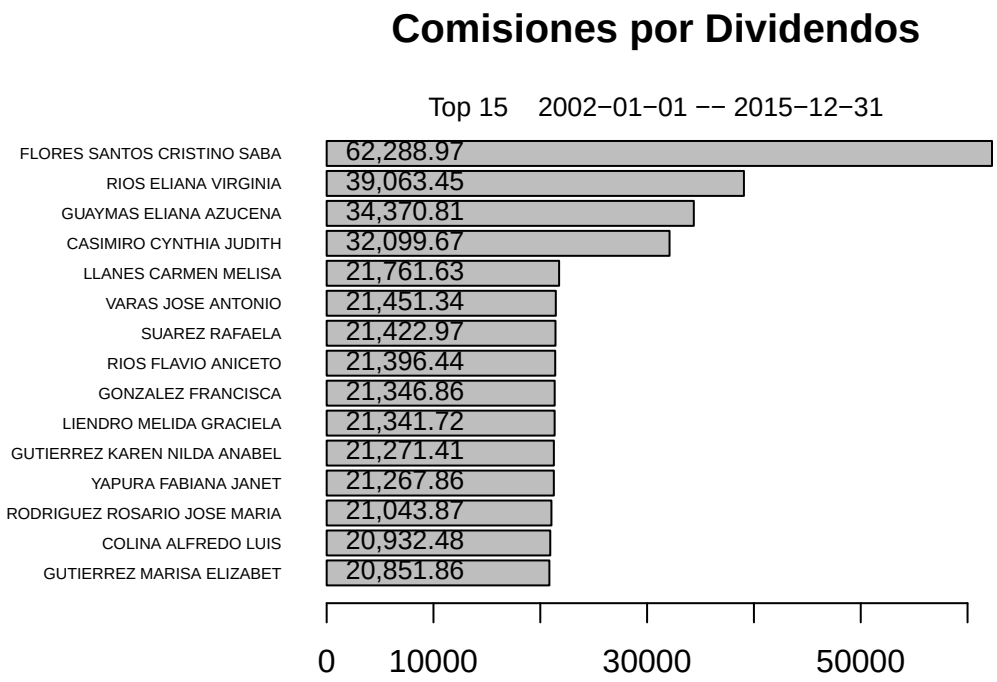



```
# Filters

Divra4 <- DIVRA4[DIVRA4$TiCdId == 4, ]
Divra4 <- Divra4[Divra4$DivComMonto > 0, ]

# Join tables DIVRA and DIVRA4 to get date
Divra44 <- merge(Divra4, DIVRA, by = 'DRAID')
Divra44 <- Divra44[, c(names(Divra4), 'DRAFecPos')]
Divra44 <- Divra44[Divra44$DRAFecPos >= FromDate & Divra44$DRAFecPos <= ToDate, ]

# Join tables DIVRA44 and PERSONAS to get Personal data
Comi <- merge(Divra44, PERSONAS, by = 'ComiCodigo')
Comi <- Comi[, c(names(Divra44), 'PersTitular', 'PersApellido',
                 'PersNumeroDoc', 'PersPorPar')]

# Compute each person's total comission
Comi$Monto <- Comi$DivComMonto * (Comi$PersPorPar / 100)
ComiPers <- aggregate(x = Comi$Monto,
                      by = list(PersApellido = Comi$PersApellido,
                                PersNumeroDoc = Comi$PersNumeroDoc),
                      sum)
```

```r
names(ComiPers)[3] <- 'Monto'

# add to accumulator
TotPers <- rbind(TotPers, ComiPers)
TotPers <- aggregate(x = TotPers$Monto,
                     by = list(PersApellido  = TotPers$PersApellido,
                               PersNumeroDoc = TotPers$PersNumeroDoc),
                     sum)
names(TotPers)[3] <- c('Monto')
```

```r
# plot Ranking
plot_TopN(ComiPers, N, 'Comisiones por Dividendos')
```

Test Comisiones x Dividendos

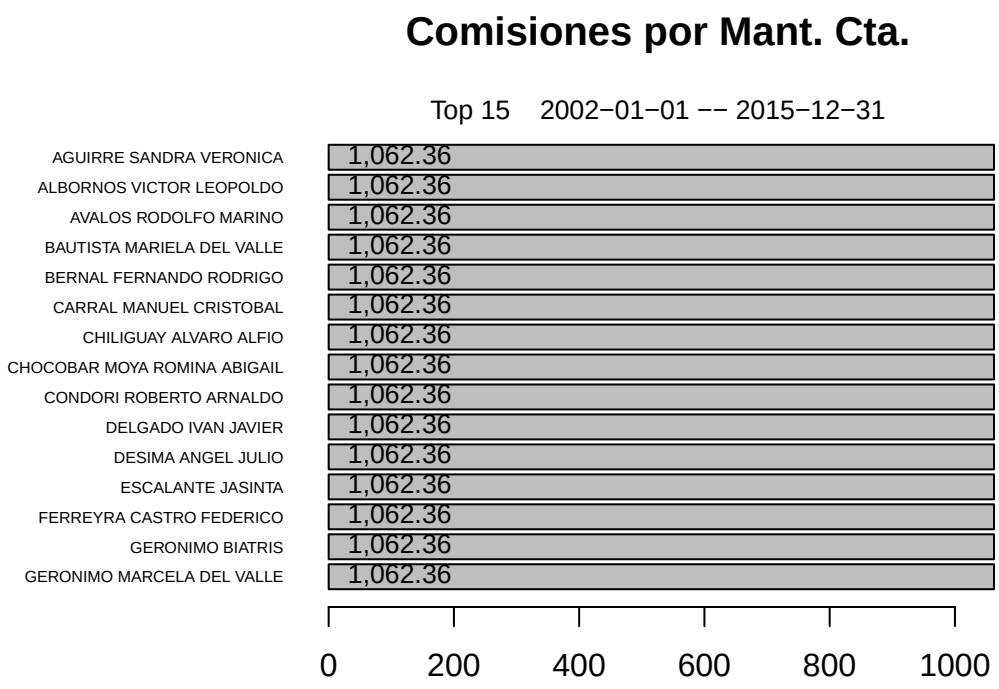



```r
# Filters
CtaCte <- CUENTACORRIENTE[CUENTACORRIENTE$CompId == 5, ]

# Join tables CtaCte and PERSONAS to get Personal data
CtaCte <- CtaCte[CtaCte$CuCoFecConcertacion >= FromDate &
```

```
                    CtaCte$CuCoFecConcertacion <= ToDate, ]
Comi <- merge(CtaCte, PERSONAS, by = 'ComiCodigo')
Comi <- Comi[, c(names(CtaCte), 'PersTitular', 'PersApellido',
                 'PersNumeroDoc', 'PersPorPar')]

# Compute each person's total comission
Comi$Monto <- Comi$CuCoImporte * (Comi$PersPorPar / 100)
ComiPers <- aggregate(x = Comi$Monto,
                      by = list(PersApellido = Comi$PersApellido,
                                PersNumeroDoc = Comi$PersNumeroDoc),
                      sum)
names(ComiPers)[3] <- 'Monto'

# add to accumulator
TotPers <- rbind(TotPers, ComiPers)
TotPers <- aggregate(x = TotPers$Monto,
                     by = list(PersApellido  = TotPers$PersApellido,
                               PersNumeroDoc = TotPers$PersNumeroDoc),
                     sum)
names(TotPers)[3] <- c('Monto')
```

```
# plot Ranking
plot_TopN(ComiPers, N, 'Comisiones por Mant. Cta.')
```

Test Comisiones x Mant de Cta

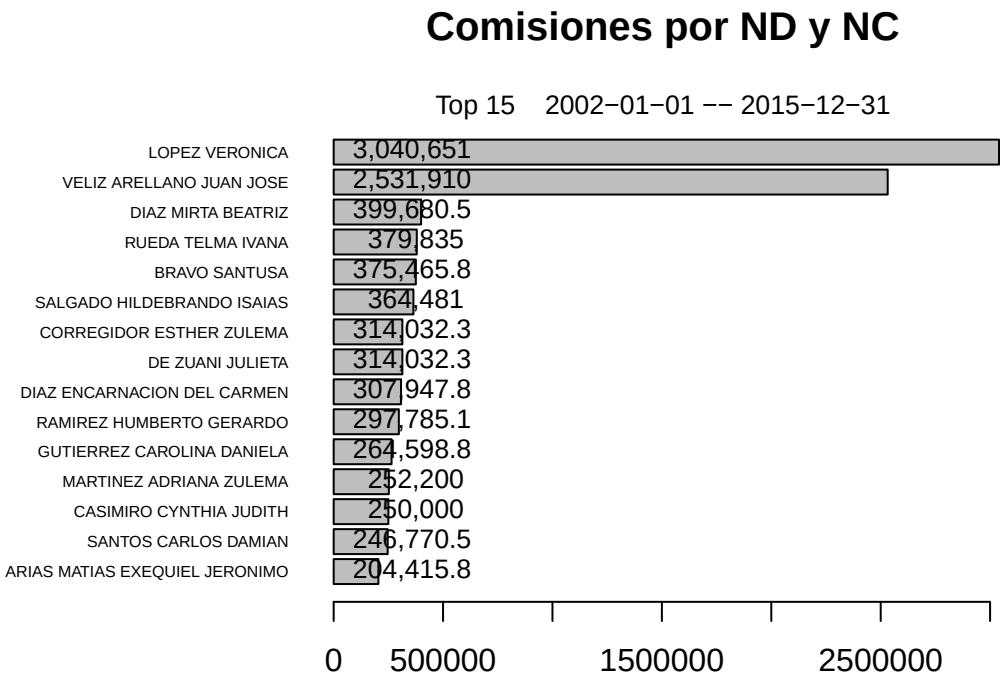



```
# Filters
CompMov <- COMPMOV[COMPMOV$CompId == 18 | COMPMOV$CompId == 19, ]
CompMov <- CompMov[CompMov$CompFecAnul == '1753-01-01', ]

# Join tables CompMov and PERSONAS to get Personal data
CompMov <- CompMov[CompMov$CompFecha >= FromDate & CompMov$CompFecha <= ToDate,]
Comi <- merge(CompMov, PERSONAS, by = 'ComiCodigo')
Comi <- Comi[, c('ComiCodigo', 'CompId','CompFecha','CompImporte', 'PersTitular', 'PersApellido',
                 'PersNumeroDoc', 'PersPorPar')]

# Reverse sign of NCs
Comi[Comi$CompId == 19, 'CompImporte'] <- Comi[Comi$CompId == 19, 'CompImporte'] * (-1)

# Compute each person's total comission
Comi$Monto <- Comi$CompImporte * (Comi$PersPorPar / 100)
ComiPers <- aggregate(x = Comi$Monto,
                      by = list(PersApellido = Comi$PersApellido,
                                PersNumeroDoc = Comi$PersNumeroDoc),
                      sum)
names(ComiPers)[3] <- 'Monto'

# add to accumulator
TotPers <- rbind(TotPers, ComiPers)
```

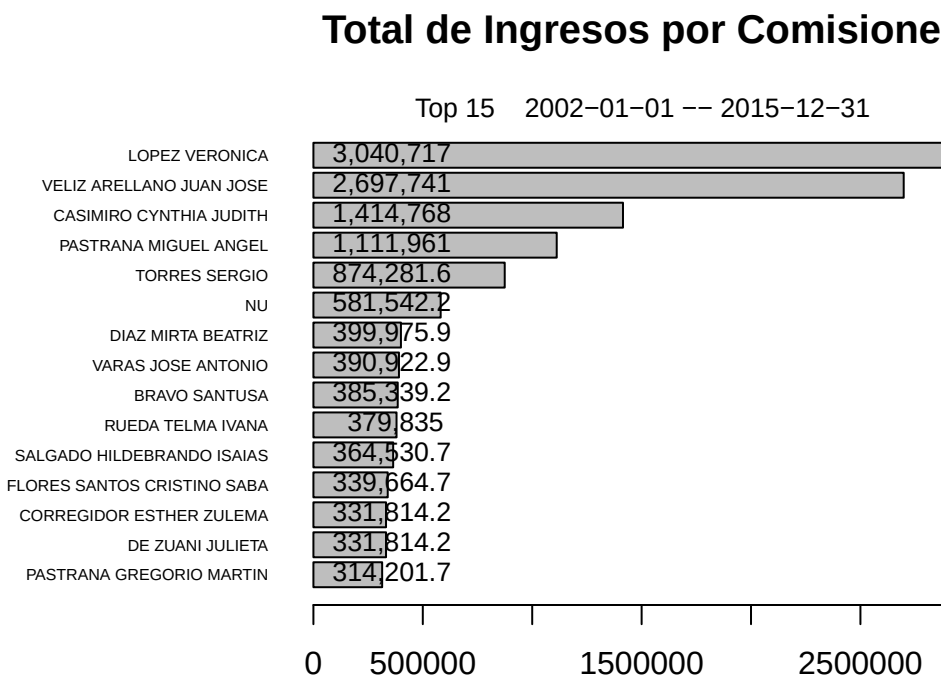
```
TotPers <- aggregate(x = TotPers$Monto,
                     by = list(PersApellido  = TotPers$PersApellido,
                               PersNumeroDoc = TotPers$PersNumeroDoc),
                     sum)
names(TotPers)[3] <- c('Monto')
```

```
# plot Ranking
plot_TopN(ComiPers, N, 'Comisiones por ND y NC')
```

Test Comisiones x ND y NC




```
plot_TopN(TotPers, 15, 'Total de Ingresos por Comisiones')
```



Total Ingresos por Comisiones

Test Ranking de AuM

AuM Parameters: Period and number of customers

```
## [1] "01-01-2015"
## [1] "31-12-2015"
## [1] 15
```

```
# Filters
Operico <- OPERICO[OPERICO$ICoFecha >= FromDate & OPERICO$ICoFecha <= ToDate,]

# Join tables Operico and PERSONAS to get Personal data
Posi <- merge(Operico, PERSONAS, by = 'ComiCodigo')
Posi <- Posi[, c(names(Operico)[1:3], 'PersTitular', 'PersApellido',
                 'PersNumeroDoc', 'PersPorPar')]

# Compute each person's net posicion
Posi$Monto <- Posi$ICoPosGlb * (Posi$PersPorPar / 100)
PosiPers <- aggregate(x = Posi$Monto,
                      by = list(PersApellido = Posi$PersApellido,
                                PersNumeroDoc = Posi$PersNumeroDoc),
```

```
                      sum)
names(PosiPers)[3] <- 'Monto'
```

```
# plot Ranking
plot_TopN(PosiPers, N, 'Assets under Management')
```

AuM Ranking Computation