# Average Salary by Department

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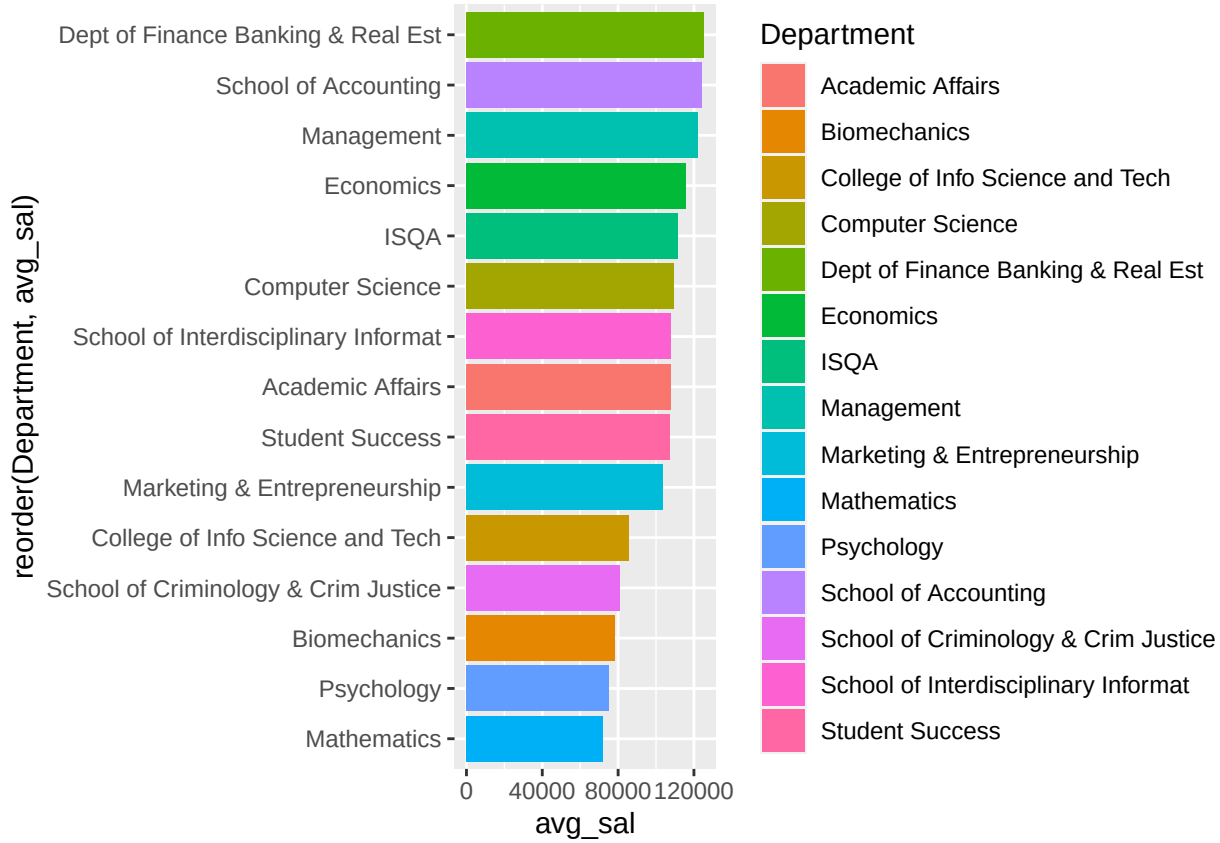
```
#My lovely scripts!
unoSalaryByDept <- unoSalary[,c(1:5)]
count_empl <- unoSalaryByDept %>% count(Department)
unoSalaryByDept <- unoSalaryByDept %>% group_by(Employee) %>% summarise(Budgeted..Annual.Salary = sum(Bu
```

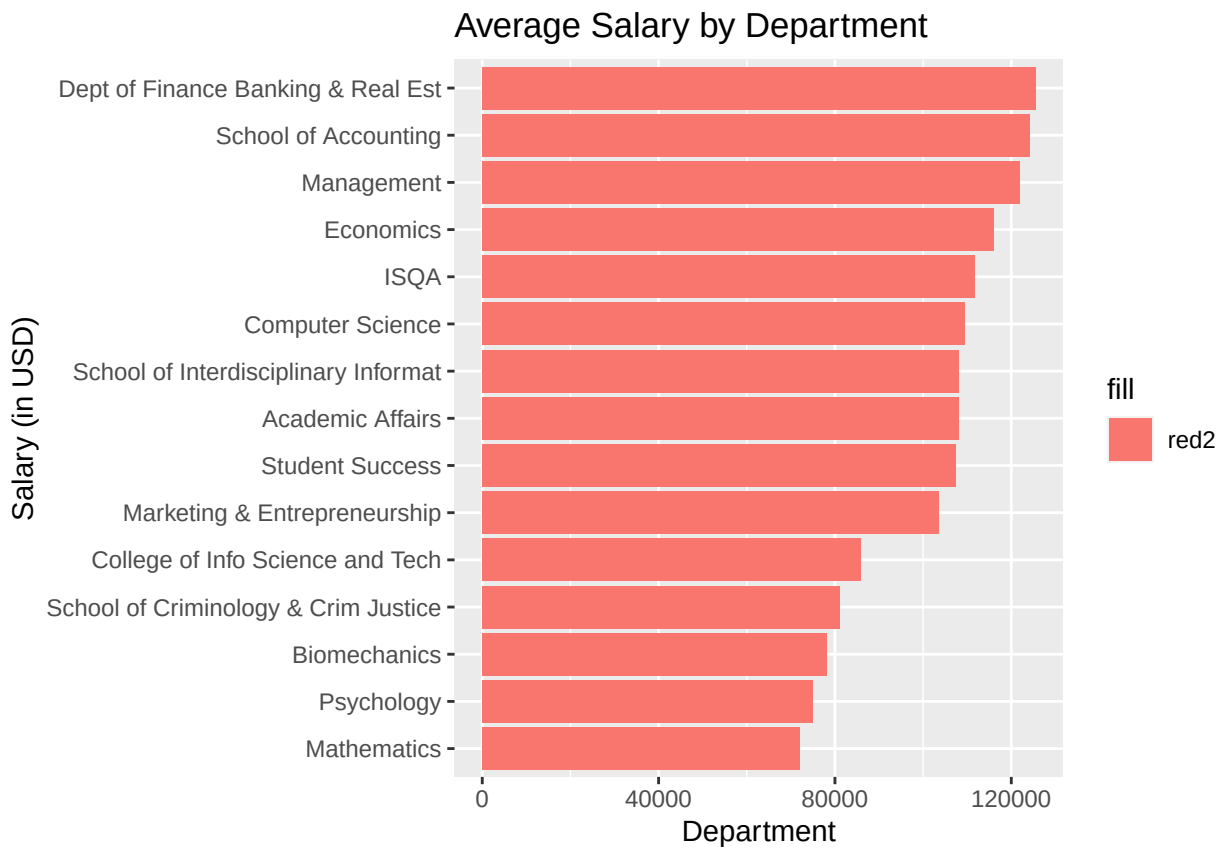
```
## `summarise()` has grouped output by 'Employee'. You can override using the `.groups` argument.
```

```
unoSalaryByDeptWithAvg <-unoSalaryByDept %>%
  group_by(Department) %>%
  summarise_at(vars(Budgeted..Annual.Salary), list(avg_sal = mean))
unoSalaryByDeptWithAvg$EmployeeCount <- count_empl[,2]

UNOdepartmentData <- unoSalaryByDeptWithAvg[order(unoSalaryByDeptWithAvg$avg_sal, decreasing = T),]

UNOdepartmentData <- UNOdepartmentData[which(UNOdepartmentData$EmployeeCount>=15),]

top10_avgsal <- top_n(UNOdepartmentData, 15, UNOdepartmentData$avg_sal)

beans <- within(top10_avgsal,
                  avg_sal <- factor(avg_sal,
                                    levels=names(sort(table(avg_sal),
                                                      decreasing=TRUE))))
```

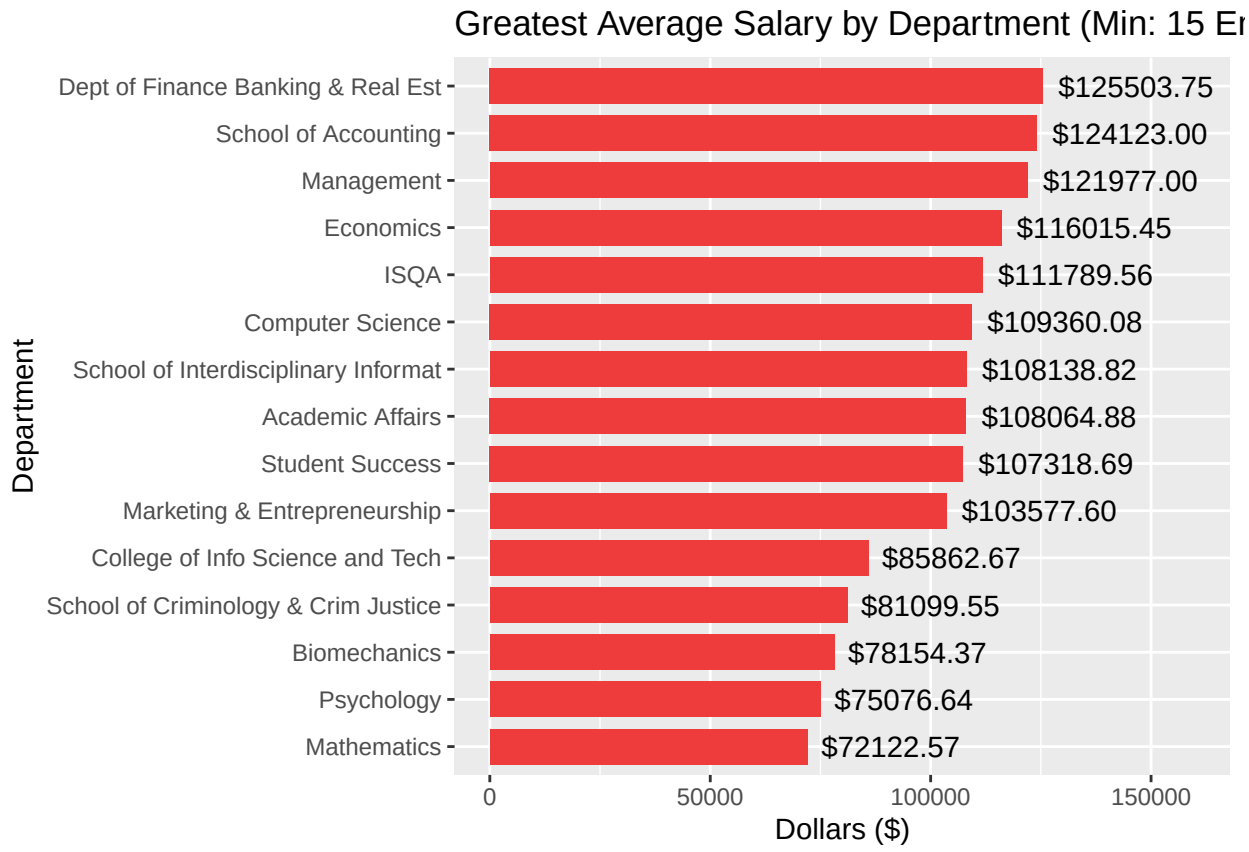
```
plot <- (ggplot(top10_avgsal, aes(x = reorder(Department, avg_sal), y = avg_sal, fill = "red2")) + geom_

plot <- (ggplot(top10_avgsal, aes(x = reorder(Department, avg_sal), y = avg_sal, fill = Department)) + g
plot
```




```
plot <- (ggplot(top10_avgsal, aes(x = reorder(Department, avg_sal), y = avg_sal, fill = "red2")) + geom_

plot1 <- (ggplot(top10_avgsal, aes(x = reorder(Department, avg_sal), y = avg_sal)) + geom_bar(stat = "id

plot
```


Average Salary by Department
Dept of Finance Banking & Real Est
School of Accounting
Management
Economics
ISQA
Computer Science
School of Interdisciplinary Informat
Academic Affairs
Student Success
Marketing & Entrepreneurship
College of Info Science and Tech
School of Criminology & Crim Justice
Biomechanics
Psychology
Mathematics
Salary (in USD)
0
40000
80000
120000
Department
fill
red2

```
plot1
```




```
unoSalaryByDept <- unoSalary[,c(1:5)]
count_empl <- unoSalaryByDept %>% count(Department)
unoSalaryByDept <- unoSalaryByDept %>% group_by(Employee) %>% summarise(Budgeted..Annual.Salary = sum(Bu
```

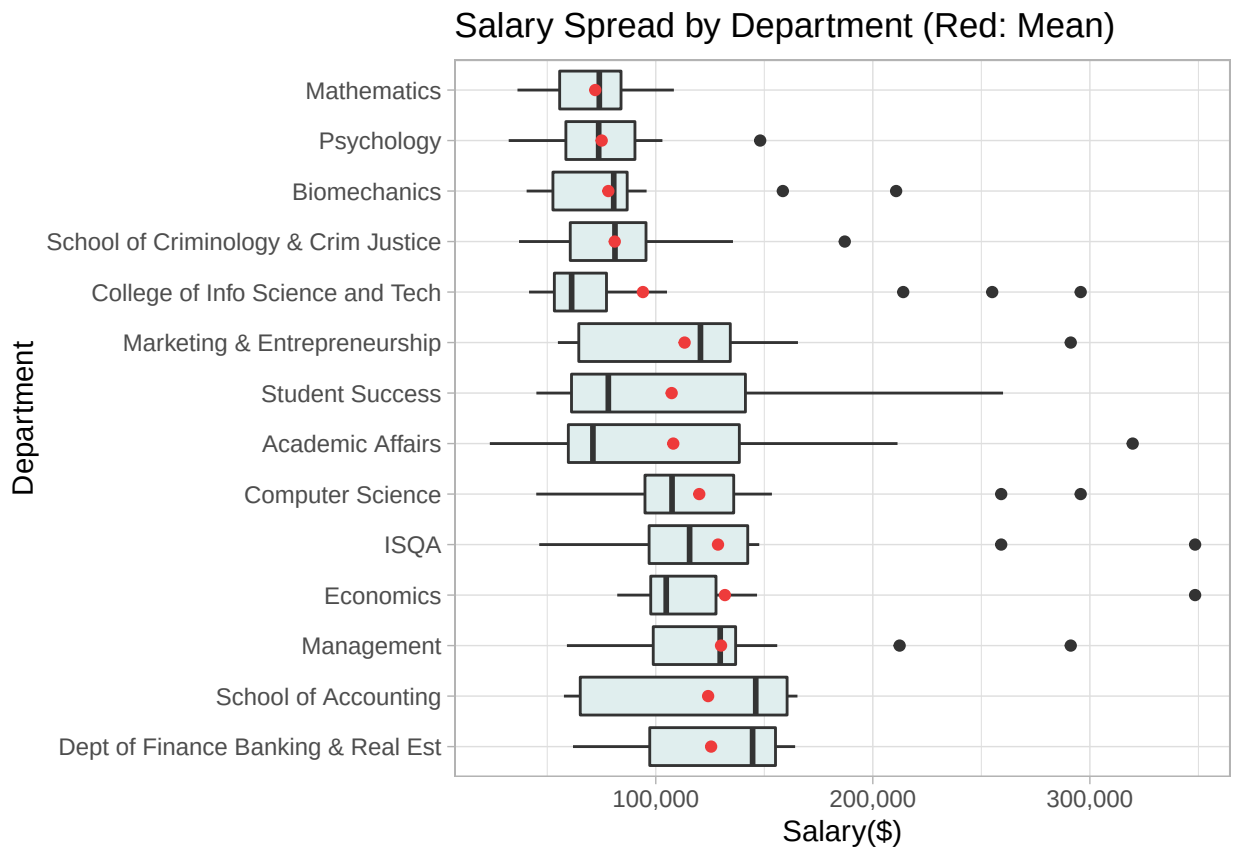
```
## `summarise()` has grouped output by 'Employee'. You can override using the `.groups` argument.
```

```
unoSalaryByDeptWithAvg <-unoSalaryByDept %>%
  group_by(Department) %>%
  summarise_at(vars(Budgeted..Annual.Salary), list(avg_sal = mean))
unoSalaryByDeptWithAvg$EmployeeCount <- count_empl[,2]

UNOdepartmentData <- unoSalaryByDeptWithAvg[order(unoSalaryByDeptWithAvg$avg_sal),]
```

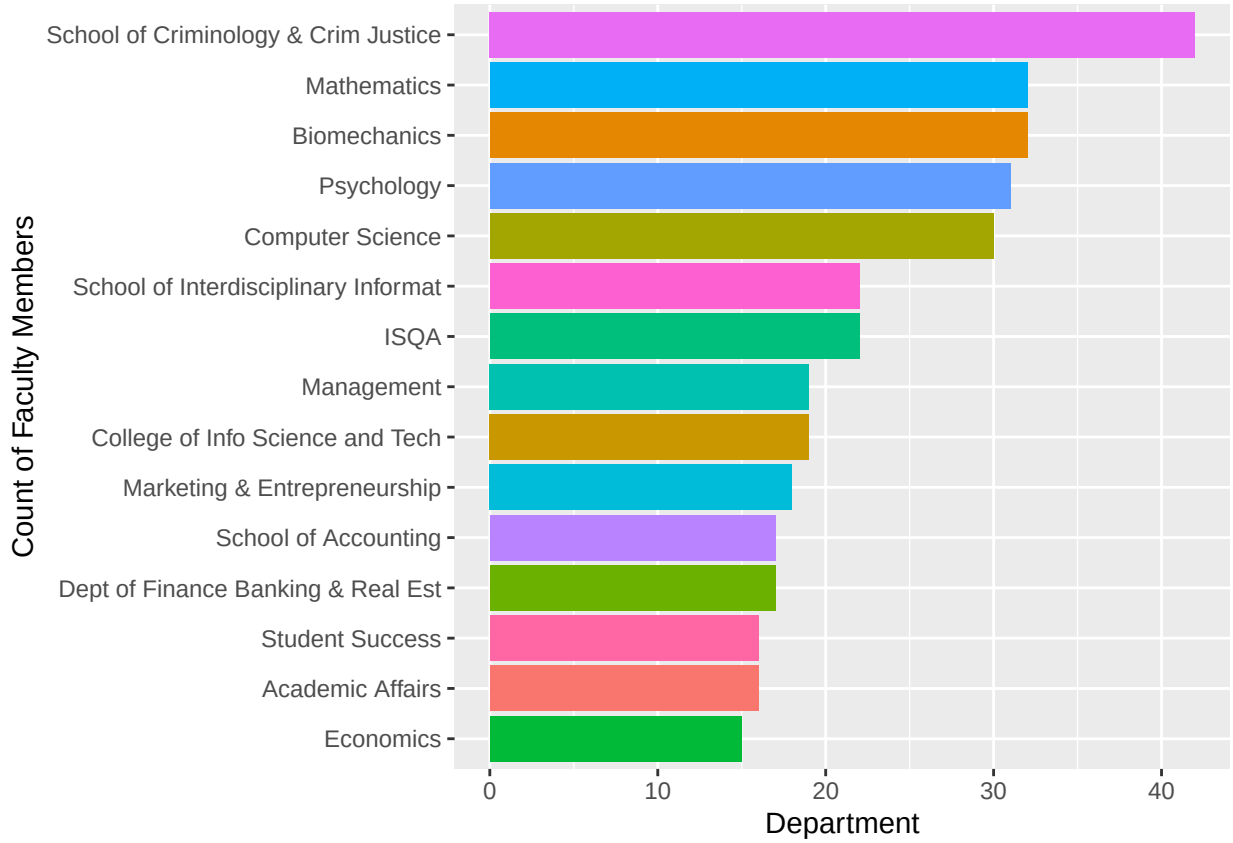
```
boxSalaries = unoSalaryByDept[which((unoSalaryByDept$Department == "Economics")|(unoSalaryByDept$Departm
```

```
## `summarise()` has grouped output by 'Employee'. You can override using the `.groups` argument.
```

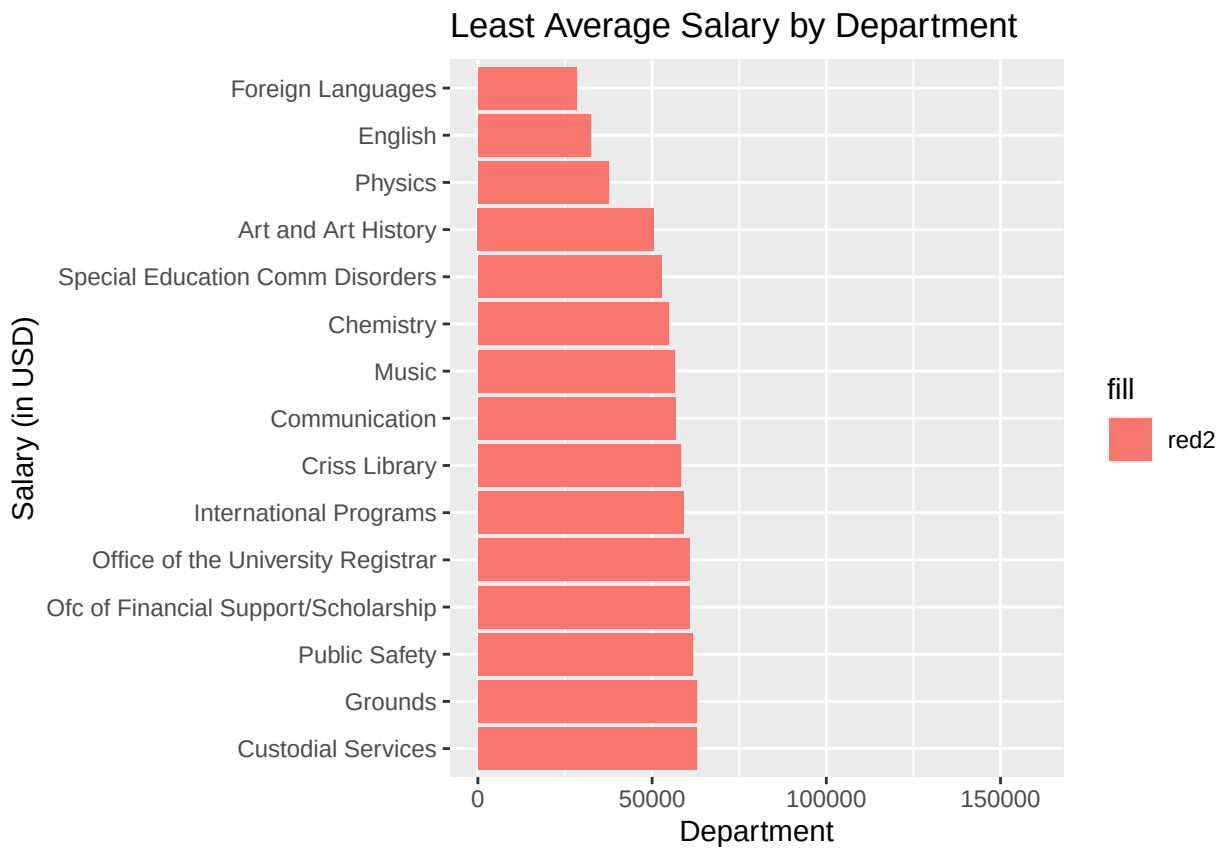
```
# Box-plots of mpg by number of gears
# observations (points) are overlayed and jittered

boxSalaries %>%
  ggplot(aes(y = Budgeted..Annual.Salary, x = factor(Department, levels=c("Dept of Finance Banking & Rea
  geom_boxplot(fill = "azure2") +
  labs(title = "Salary Spread by Department (Red: Mean)", x = "Department", y = "Salary($)") + coord_fli
```



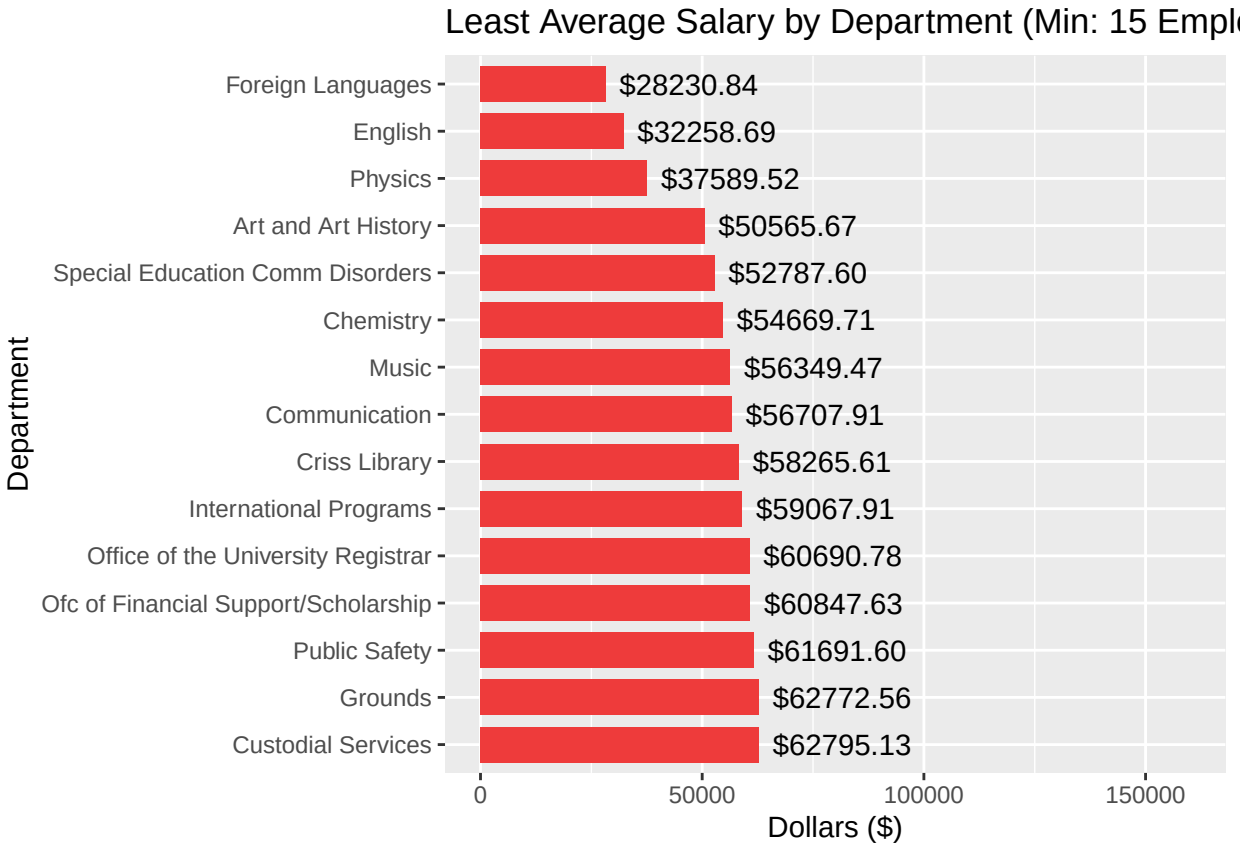

```
(ggplot(top10_avgsal, aes(x = reorder(Department, EmployeeCount), y = EmployeeCount, fill = Department)
```




```
UNOdepartmentData <- UNOdepartmentData[which(UNOdepartmentData$EmployeeCount>=15),]

last10_avgsal <- top_n(UNOdepartmentData, -15, UNOdepartmentData$avg_sal)


plot <- (ggplot(last10_avgsal, aes(x = rev(reorder(Department, avg_sal)), y = avg_sal, fill = "red2")) +


plot1 <- (ggplot(last10_avgsal, aes(x = rev(reorder(Department, avg_sal)), y = avg_sal)) + geom_bar(sta

plot
```


Least Average Salary by Department
Foreign Languages
English
Physics
Art and Art History
Special Education Comm Disorders
Chemistry
Music
Communication
Criss Library
International Programs
Office of the University Registrar
Ofc of Financial Support/Scholarship
Public Safety
Grounds
Custodial Services
Salary (in USD)
0
50000
100000
150000
Department
fill
red2

```
plot1
```


Least Average Salary by Department (Min: 15 Empl
Department
Foreign Languages
English
Physics
Art and Art History
Special Education Comm Disorders
Chemistry
Music
Communication
Criss Library
International Programs
Office of the University Registrar
Ofc of Financial Support/Scholarship
Public Safety
Grounds
Custodial Services
$28230.84
$32258.69
$37589.52
$50565.67
$52787.60
$54669.71
$56349.47
$56707.91
$58265.61
$59067.91
$60690.78
$60847.63
$61691.60
$62772.56
$62795.13
0
50000
100000
150000
Dollars ($)