Module8Assignment.R

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```
# Step 1
library(plyr)
StudentAssignment6 <- read.table("/Users/owenkraker/Documents/Intro.Data.Science/Assignment6Dataset.txt
                                 header = TRUE, sep = ",", stringsAsFactors = FALSE)
StudentAssignment6
```

```
##          Name Age    Sex Grade
## 1        Raul  25   Male    80
## 2     Booker  18   Male    83
## 3      Lauri  21 Female    90
## 4     Leonie  21 Female    91
## 5    Sherlyn  22 Female    85
## 6    Mikaela  20 Female    69
## 7    Raphael  23   Male    91
## 8       Aiko  24 Female    97
## 9   Tiffaney  21 Female    78
## 10    Corina  23 Female    81
## 11 Petronila  23 Female    98
## 12    Alecia  20 Female    87
## 13   Shemika  23 Female    97
## 14    Fallon  22 Female    90
## 15   Deloris  21 Female    67
## 16    Randee  23 Female    91
## 17     Eboni  20 Female    84
## 18   Delfina  19 Female    93
## 19 Ernestina  19 Female    93
## 20      Milo  19   Male    67
```

```
StudentAverage <- ddply(StudentAssignment6, "Sex", transform,
                        Grade.Average = mean(Grade, na.rm = TRUE))
StudentAverage
```

```
##          Name Age    Sex Grade Grade.Average
## 1      Lauri  21 Female    90       86.9375
## 2     Leonie  21 Female    91       86.9375
## 3    Sherlyn  22 Female    85       86.9375
## 4    Mikaela  20 Female    69       86.9375
## 5       Aiko  24 Female    97       86.9375
## 6   Tiffaney  21 Female    78       86.9375
## 7     Corina  23 Female    81       86.9375
## 8  Petronila  23 Female    98       86.9375
```

```
## 9     Alecia  20 Female    87       86.9375
## 10   Shemika  23 Female    97       86.9375
## 11    Fallon  22 Female    90       86.9375
## 12   Deloris  21 Female    67       86.9375
## 13    Randee  23 Female    91       86.9375
## 14     Eboni  20 Female    84       86.9375
## 15   Delfina  19 Female    93       86.9375
## 16 Ernestina  19 Female    93       86.9375
## 17      Raul  25   Male    80       80.2500
## 18    Booker  18   Male    83       80.2500
## 19   Raphael  23   Male    91       80.2500
## 20      Milo  19   Male    67       80.2500
```

```r
write.table(StudentAverage, "Student_Average_Output.txt", row.names = FALSE, sep = "\t")

# Step 2
StudentAssignment6 <- as.data.frame(StudentAssignment6)
i_students <- subset(StudentAssignment6, grepl("i", Name, ignore.case = TRUE))
i_students
```

```
##         Name Age    Sex Grade
## 3      Lauri  21 Female    90
## 4     Leonie  21 Female    91
## 6    Mikaela  20 Female    69
## 8       Aiko  24 Female    97
## 9   Tiffaney  21 Female    78
## 10    Corina  23 Female    81
## 11 Petronila  23 Female    98
## 12    Alecia  20 Female    87
## 13   Shemika  23 Female    97
## 15   Deloris  21 Female    67
## 17     Eboni  20 Female    84
## 18   Delfina  19 Female    93
## 19 Ernestina  19 Female    93
## 20      Milo  19   Male    67
```

```r
# Step 3
write.csv(i_students, "i_students.csv", row.names = FALSE)
```