q1

```
library(stargazer)
```

```
##
## Please cite as:
##  Hlavac, Marek (2022). stargazer: Well-Formatted Regression and Summary Statistics Tables.
##  R package version 5.2.3. https://CRAN.R-project.org/package=stargazer
```

```
setwd("~/Documents/GitHub/econ172/pset2/source")
```

Import the data and generate a table of summary statistics

```
df <- read.csv("../data/q1.csv", stringsAsFactors = TRUE)

stargazer(df)
```

```
##
## % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac a
## % Date and time: Sun, Oct 19, 2025 - 20:51:08
## \begin{table}[!htbp] \centering
##   \caption{}
##   \label{}
## \begin{tabular}{@{\extracolsep{5pt}}lccccc}
## \\[-1.8ex]\hline
## \hline \\[-1.8ex]
## Statistic & \multicolumn{1}{c}{N} & \multicolumn{1}{c}{Mean} & \multicolumn{1}{c}{St. Dev.} & \multi
## \hline \\[-1.8ex]
## student\_id & 533 & 310.246 & 177.595 & 1 & 619 \\
## treatment & 533 & 0.493 & 0.500 & 0 & 1 \\
## student\_age & 533 & 12.413 & 1.357 & 10 & 15 \\
## student\_female & 533 & 0.771 & 0.421 & 0 & 1 \\
## student\_grade & 533 & 7.182 & 1.101 & 4 & 9 \\
## BL\_math\_percent & 533 & 0.316 & 0.124 & 0.010 & 0.758 \\
## BL\_hindi\_percent & 533 & 0.435 & 0.167 & 0.041 & 0.923 \\
## BL\_ses\_index & 533 & $-$0.053 & 1.657 & $-$5.548 & 4.117 \\
## EL\_math\_percent & 533 & 0.504 & 0.179 & $-$0.009 & 1.007 \\
## EL\_hindi\_percent & 533 & 0.555 & 0.193 & 0.072 & 1.005 \\
## EL\_ses\_index & 533 & $-$0.059 & 1.661 & $-$5.681 & 4.128 \\
## \hline \\[-1.8ex]
## \end{tabular}
## \end{table}
```

Check whether the treatment and control groups are balanced

```
student_age <- lm(student_age ~ treatment, df)
student_female <- lm(student_female ~ treatment, df)
BL_ses_index <- lm(BL_ses_index ~ treatment, df)
BL_math_percent <- lm(BL_math_percent ~ treatment, df)
BL_hindi_percent <- lm(BL_hindi_percent ~ treatment, df)
```

```
stargazer(student_age, student_female)
```

```
##
## % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac a
## % Date and time: Sun, Oct 19, 2025 - 20:51:08
## \begin{table}[!htbp] \centering
##   \caption{}
##   \label{}
## \begin{tabular}{@{\extracolsep{5pt}}lcc}
## \\[-1.8ex]\hline
## \hline \\[-1.8ex]
##  & \multicolumn{2}{c}{\textit{Dependent variable:}} \\
## \cline{2-3}
## \\[-1.8ex] & student\_age & student\_female \\
## \\[-1.8ex] & (1) & (2)\\
## \hline \\[-1.8ex]
##  treatment & 0.153 & 0.001 \\
##   & (0.117) & (0.036) \\
##   & & \\
##  Constant & 12.337$^{***}$ & 0.770$^{***}$ \\
##   & (0.083) & (0.026) \\
##   & & \\
## \hline \\[-1.8ex]
## Observations & 533 & 533 \\
## R$^{2}$ & 0.003 & 0.00000 \\
## Adjusted R$^{2}$ & 0.001 & $-$0.002 \\
## Residual Std. Error (df = 531) & 1.356 & 0.421 \\
## F Statistic (df = 1; 531) & 1.707 & 0.002 \\
## \hline
## \hline \\[-1.8ex]
## \textit{Note:}  & \multicolumn{2}{r}{$^{*}$p$<$0.1; $^{**}$p$<$0.05; $^{***}$p$<$0.01} \\
## \end{tabular}
## \end{table}
```

```
stargazer(BL_ses_index, BL_math_percent, BL_hindi_percent)
```

```
##
## % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac a
## % Date and time: Sun, Oct 19, 2025 - 20:51:08
## \begin{table}[!htbp] \centering
##   \caption{}
##   \label{}
## \begin{tabular}{@{\extracolsep{5pt}}lccc}
## \\[-1.8ex]\hline
## \hline \\[-1.8ex]
##  & \multicolumn{3}{c}{\textit{Dependent variable:}} \\
## \cline{2-4}
## \\[-1.8ex] & BL\_ses\_index & BL\_math\_percent & BL\_hindi\_percent \\
## \\[-1.8ex] & (1) & (2) & (3)\\
## \hline \\[-1.8ex]
##  treatment & $-$0.191 & $-$0.014 & 0.010 \\
##   & (0.143) & (0.011) & (0.014) \\
##   & & & \\
##  Constant & 0.041 & 0.323$^{***}$ & 0.430$^{***}$ \\
```

```
##   & (0.101) & (0.008) & (0.010) \\
##   & & & \\
## \hline \\[-1.8ex]
## Observations & 533 & 533 & 533 \\
## R$^{2}$ & 0.003 & 0.003 & 0.001 \\
## Adjusted R$^{2}$ & 0.001 & 0.001 & $-$0.001 \\
## Residual Std. Error (df = 531) & 1.656 & 0.124 & 0.167 \\
## F Statistic (df = 1; 531) & 1.766 & 1.572 & 0.522 \\
## \hline
## \hline \\[-1.8ex]
## \textit{Note:}  & \multicolumn{3}{r}{$^{*}$p$<$0.1; $^{**}$p$<$0.05; $^{***}$p$<$0.01} \\
## \end{tabular}
## \end{table}
```

Estimate impact of the treatment on math and Hindi scores at endline

```
math <- lm(EL_math_percent ~ treatment, df)
hindi <- lm(EL_hindi_percent ~ treatment, df)

stargazer(math, hindi)
```

```
##
## % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac a
## % Date and time: Sun, Oct 19, 2025 - 20:51:08
## \begin{table}[!htbp] \centering
##   \caption{}
##   \label{}
## \begin{tabular}{@{\extracolsep{5pt}}lcc}
## \\[-1.8ex]\hline
## \hline \\[-1.8ex]
##  & \multicolumn{2}{c}{\textit{Dependent variable:}} \\
## \cline{2-3}
## \\[-1.8ex] & EL\_math\_percent & EL\_hindi\_percent \\
## \\[-1.8ex] & (1) & (2)\\
## \hline \\[-1.8ex]
##  treatment & 0.077$^{***}$ & 0.065$^{***}$ \\
##   & (0.015) & (0.016) \\
##   & & \\
##  Constant & 0.466$^{***}$ & 0.523$^{***}$ \\
##   & (0.011) & (0.012) \\
##   & & \\
## \hline \\[-1.8ex]
## Observations & 533 & 533 \\
## R$^{2}$ & 0.047 & 0.029 \\
## Adjusted R$^{2}$ & 0.045 & 0.027 \\
## Residual Std. Error (df = 531) & 0.175 & 0.190 \\
## F Statistic (df = 1; 531) & 26.040$^{***}$ & 15.689$^{***}$ \\
## \hline
## \hline \\[-1.8ex]
## \textit{Note:}  & \multicolumn{2}{r}{$^{*}$p$<$0.1; $^{**}$p$<$0.05; $^{***}$p$<$0.01} \\
## \end{tabular}
## \end{table}
```