HW12 - Poisson Regression

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0.0.1 Problem 1(a)

0.1 Document Information.

All of the statistical analyses in this document will be performed using R version 4.1.0 (2021-05-18). R packages used will be maintained using the packrat dependency management system.

```
sessionInfo()
```

```
## R version 4.1.0 (2021-05-18)
## Platform: x86_64-w64-mingw32/x64 (64-bit)
## Running under: Windows 10 x64 (build 19041)
##
## Matrix products: default
##
## locale:
## [1] LC_COLLATE=English_United States.1252
## [2] LC_CTYPE=English_United States.1252
## [3] LC_MONETARY=English_United States.1252
## [4] LC_NUMERIC=C
## [5] LC_TIME=English_United States.1252
##
## attached base packages:
## [1] grid      stats     graphics  grDevices utils     datasets  methods
## [8] base
##
## other attached packages:
##  [1] Matrix_1.3-4      psych_2.1.6       leaps_3.1         faraway_1.0.7
##  [5] xtable_1.8-4      lmtest_0.9-38     zoo_1.8-9         PairedData_1.1.1
##  [9] mvtnorm_1.1-2     gld_2.6.2         ggpubr_0.4.0      car_3.0-11
## [13] carData_3.0-4     mnormt_2.0.2      vcd_1.4-8         epiDisplay_3.5.0.1
## [17] nnet_7.3-16       foreign_0.8-81    Hmisc_4.5-0       Formula_1.2-4
## [21] survival_3.2-11   lattice_0.20-44   MASS_7.3-54       ggplot2_3.3.5
## [25] rmarkdown_2.8     knitr_1.33
##
## loaded via a namespace (and not attached):
##  [1] nlme_3.1-152      RColorBrewer_1.1-2  tools_4.1.0
##  [4] backports_1.2.1   utf8_1.2.1          R6_2.5.0
##  [7] rpart_4.1-15      colorspace_2.0-1    withr_2.4.2
## [10] tidyselect_1.1.1  gridExtra_2.3       curl_4.3.1
## [13] compiler_4.1.0    formatR_1.11       htmlTable_2.2.1
## [16] scales_1.1.1      checkmate_2.0.0    proxy_0.4-26
## [19] stringr_1.4.0     digest_0.6.27      minqa_1.2.4
```

```
## [22] rio_0.5.27              base64enc_0.1-3     jpeg_0.1-8.1
## [25] pkgconfig_2.0.3         htmltools_0.5.1.1   lme4_1.1-27.1
## [28] htmlwidgets_1.5.3       rlang_0.4.11        readxl_1.3.1
## [31] rstudioapi_0.13         generics_0.1.0      dplyr_1.0.7
## [34] zip_2.2.0               magrittr_2.0.1      Rcpp_1.0.6
## [37] munsell_0.5.0           fansi_0.5.0         abind_1.4-5
## [40] lifecycle_1.0.0         stringi_1.6.1       yaml_2.2.1
## [43] parallel_4.1.0          forcats_0.5.1       crayon_1.4.1
## [46] lmom_2.8                haven_2.4.1         splines_4.1.0
## [49] hms_1.1.0               tmvnsim_1.0-2       pillar_1.6.1
## [52] boot_1.3-28             ggsignif_0.6.2      glue_1.4.2
## [55] evaluate_0.14           latticeExtra_0.6-29 data.table_1.14.0
## [58] nloptr_1.2.2.2          png_0.1-7           vctrs_0.3.8
## [61] cellranger_1.1.0        gtable_0.3.0        purrr_0.3.4
## [64] tidyr_1.1.3             xfun_0.23           openxlsx_4.2.4
## [67] broom_0.7.8             e1071_1.7-7         rstatix_0.7.0
## [70] class_7.3-19            tibble_3.1.2        cluster_2.1.2
## [73] ellipsis_0.3.2
```