

HW1__zhengzhi

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P2

partA

I want to get skills of a good swimmer and a burger eater out of this class. List: tidy output, keras, burgers.

partB

Three density funtions: pmf of poisson distribution:

$$p(k) = \frac{\lambda^k e^{-\lambda}}{k!} \quad (1)$$

pdf of normal standard distribution:

$$f(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{x^2}{2}} \quad (2)$$

pdf of uniform distribution:

$$f(x) = \begin{cases} \frac{1}{a-b}, & \text{for } a \leq x \leq b \\ 0, & \text{otherwise} \end{cases} \quad (3)$$

P3

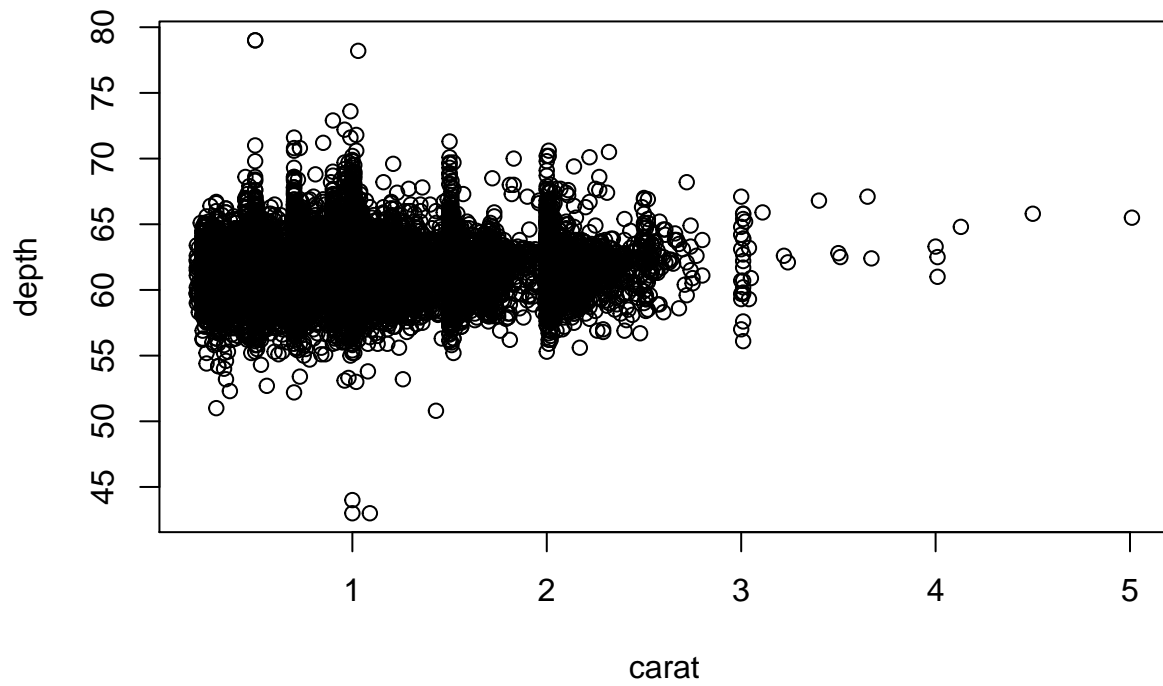
P4

```
library(ggplot2)
```

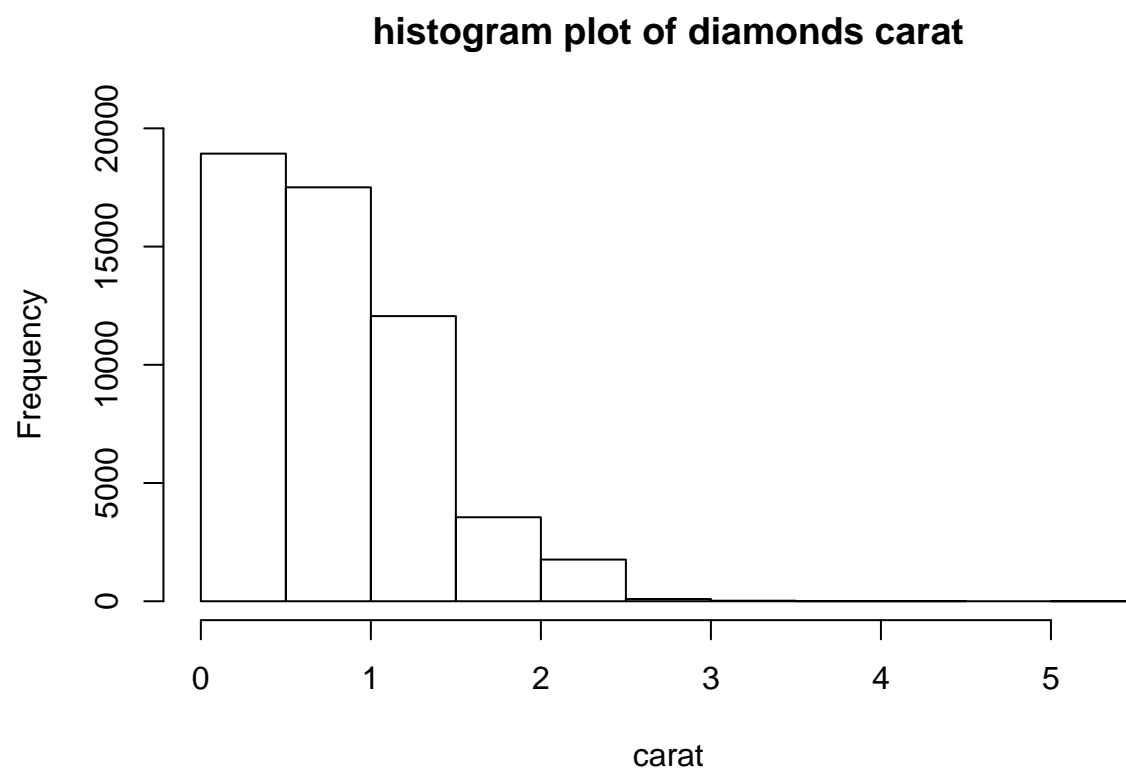
```
## Warning: package 'ggplot2' was built under R version 3.5.1
```

```
data(diamonds)
plot(x=diamonds$carat,y=diamonds$depth,
     main = "scatter plot of diamonds carat&depth",
     ylab = "depth",xlab = "carat")
```

scatter plot of diamonds carat&depth



```
hist(x=diamonds$carat, xlab = "carat",  
     main = "histogram plot of diamonds carat",  
     ylim = c(0,20000))
```



Summary of problem 4: