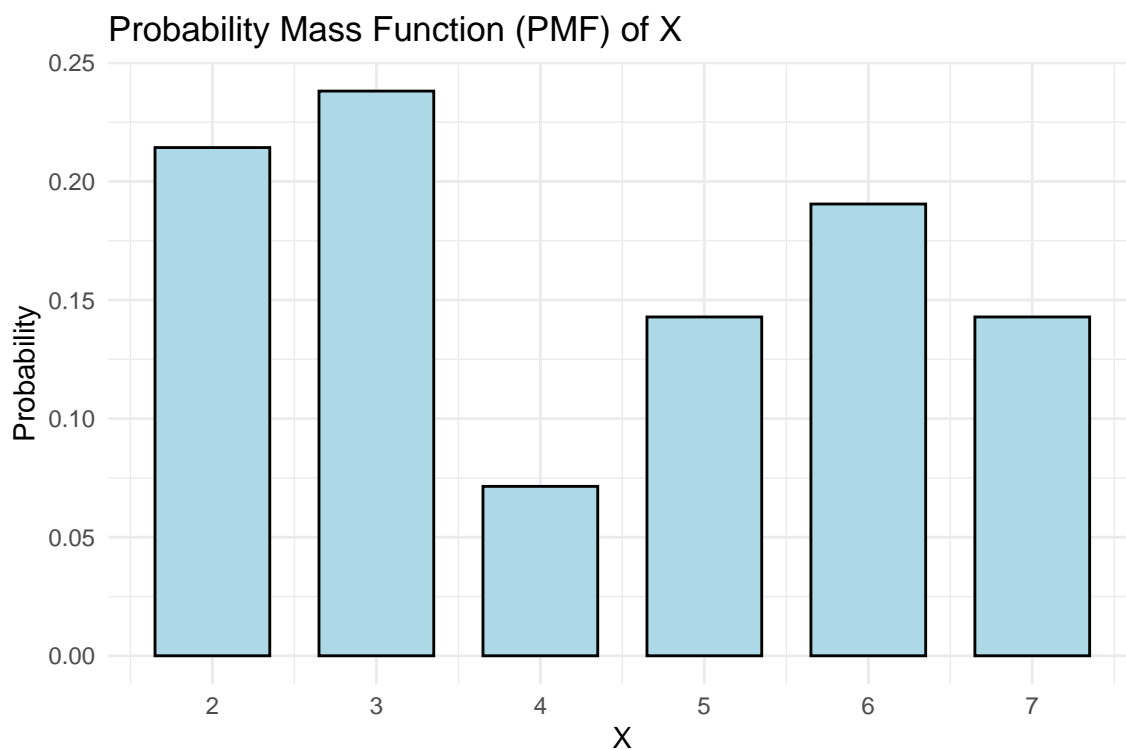


# STATS 7022 - Data Science PG Assignment 1

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```
q2 <- tibble(  
  X = c(2:7),  
  Pr = c(3/14, 5/21, 1/14, 1/7, 4/21, 1/7)  
)  
  
q2 %>%  
  ggplot(aes(x = X, y = Pr)) +  
  geom_bar(stat="identity", width=0.7, color='black', fill='lightblue') +  
  labs(x = 'X',  
       y = 'Probability',  
       title="Probability Mass Function (PMF) of X",) +  
  scale_x_continuous(breaks = 2:7) +  
  theme(text = element_text(size = 40)) +  
  theme_minimal()
```



```
q2 %>%
  ggplot(aes(x = X, y = cumsum(Pr))) +
  geom_bar(stat="identity", width=0.7, color='black', fill='lightblue') +
  labs(x = 'X',
       y = 'Probability',
       title="Cumulative Distribution Function (CDF) of X",) +
  scale_x_continuous(breaks = 2:7) +
  theme(text = element_text(size = 40)) +
  theme_minimal()
```

