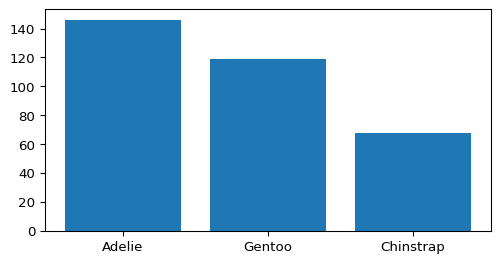
Matplotlib and plotnine

# Penguins data

from palmerpenguins import load\_penguins  
import pandas as pd  
import numpy as np  
  
penguins = load\_penguins()  
penguins\_cleaned = penguins.dropna()  
  
species\_counts = penguins\_cleaned['species'].value\_counts()

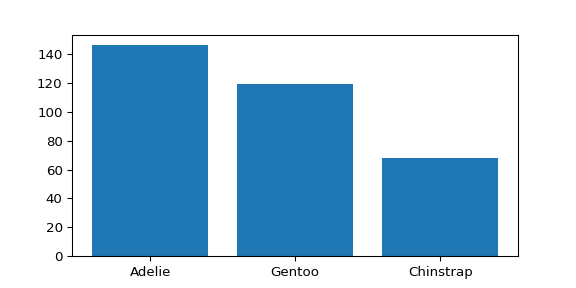
# Matplotlib

import matplotlib.pyplot as plt  
  
plot = plt.figure()  
plot.set\_figwidth(6)  
plot.set\_figheight(3)  
  
plt.bar(species\_counts.index, species\_counts.values)



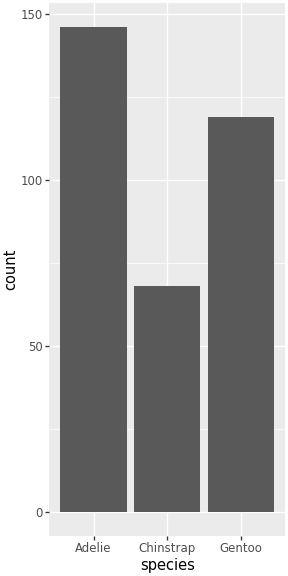
For most flexibility, save chart as an image and then use Quarto formatting of images:

plot.savefig("matplotlib\_bar.png")



# Plotnine

import plotnine as pn  
  
pn\_species\_col = (  
 pn.ggplot(species\_counts.reset\_index(), pn.aes("species",  
 "count"))  
 + pn.geom\_col()  
 + pn.theme(figure\_size=(3, 6))  
)  
pn\_species\_col



Again, export as image for most flexibility

pn\_species\_col.save("plotnine\_bar.png", dpi=300)

/home/vscode/.local/lib/python3.13/site-packages/plotnine/ggplot.py:615: PlotnineWarning: Saving 3 x 6 in image.  
/home/vscode/.local/lib/python3.13/site-packages/plotnine/ggplot.py:616: PlotnineWarning: Filename: plotnine\_bar.png