Pristian Budi Dharmawan\_2501983105\_LA20 – BB20\_Computational Biology\_Session 1\_Basic Sequence Plotting

Exercise Session 1

Task:

1. Create basic sequence that contain with minimum 50 Character of ATCG
2. Sequence:
   1. ATGCATGGTGCGCGAATGATCGCGATGGTCACACATCGCGCATGCATCATGATGACG

Answer:

# 1

# After installing BioPhyton we can import the package

import Bio

import matplotlib.pyplot as plt

dir(Bio)

from Bio.Seq import Seq

from collections import Counter

# 2

seq\_ex = Seq('ATGCATGGTGCGCGAATGATCGCGATGGTCACACATCGCGCATGCATCATGATGACG')

len(seq\_ex)

# 3

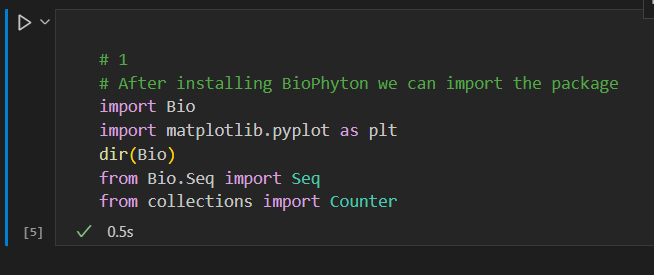
freq\_ex = Counter(seq\_ex)

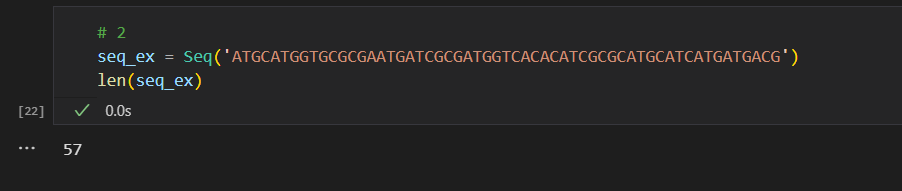
freq\_ex

# 4

plt.bar(freq\_ex.keys(),freq\_ex.values())

Result:





Graphical user interface, text

Description automatically generated

Graphical user interface

Description automatically generated with medium confidence

Chart, bar chart

Description automatically generated