# 1. FUNCTIONS

In [31]:
```
## i) WAP to calcute a Avg of 3 numbers.


def calc_avg(a,b,c):

    sum = a+b+c
    avg = sum/3
    print(avg)

    return avg

calc_avg(98,102,100)
```

```
100.0
```

Out[31]:
```
100.0
```

In [40]:
```
## ii) WAP to Convert CAD$ to INR

def converter(cad_value):
    inr_value = cad_value * 60
    print(inr_value)
    return inr_value

converter(10)
```

```
600
```

Out[40]:
```
600
```

In [43]:
```
# iii) WAP to Calculate the Price after Discount of 10%

def calculate_price(price, discount=0.10):
    final_price = price - (price * discount)
    return final_price

price = calculate_price(100)
print(f"The final price after discount is ${price}.")

##f-string: It you to embed expressions inside string , using curly braces {}
```

```
The final price after discount is $90.0.
```

In [66]:
```
#iv) WAP to print first name and last name and Pincode of the customer.

def my_function(fname, lname,PIN):
  print(fname + " " + lname + " " + PIN)

my_function("Sujeet","Nayak","411014")
```

```
Sujeet Nayak 411014
```

In [52]:
```
# v) Recursion Function (When a function call itself repeatedly)
# WAP to give us a no in descending order  n, n-1, till n == 0.

def show(n):
    if (n == 0):
         return
    print(n)
    show(n-1)

show(5)
```

```
5
4
3
2
1
```

# 2. LAMDA FUNCTION

In [56]:
```
# i) Multiply argument a with argument b and return the result:

x = lambda a, b : a * b
print(x(5, 6))
```

```
30
```

In [65]:
```
# ii) Summarize argument a, b, and c and return the result:

x = lambda a, b, c : a + b + c
print(x(5, 6, 2))
```

```
13
```

In [57]:
```
#The MAP FUNCTION applies a given function to all items in an input list
# iii) WAP  Using map with a lambda function to square each numberto Square each number in a list

numbers = [1, 2, 3, 4, 5]

squared_numbers = list(map(lambda x: x ** 2, numbers))

print(squared_numbers)
```

```
[1, 4, 9, 16, 25]
```

In [58]:
```
#The FILTER FUNCTION filters elements from an input list
# iv) WAP to Filter out even numbers from a list

numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]


even_numbers = list(filter(lambda x: x % 2 == 0, numbers))

print(even_numbers)
```

```
[2, 4, 6, 8, 10]
```

In [64]:
```
#REDUCE FUNCTION is used when we want a Aggregate of result in output such as Mul,Add etc.
# v) Using reduce with a lambda function to multiply all numbers together

numbers = [1, 2, 3, 4, 5]

product = reduce(lambda x, y: x * y, numbers)

print(product)
```

```
120
```

# 3. IF STATEMENT

In [67]:
```
# i) WAP to print if the input value is greater than or smaller than b.

a = int(input())
b = 30
```

```
if b > a:
  print("b is greater than a")
elif a == b:
  print("a and b are equal")
else:
  print("a is greater than b")
```

```
50
a is greater than b
```

In [71]:

```
# ii) WAP to check input No. is odd or even

x = int(input())

if x % 2 == 0:
  print("It is even number")
elif x ==0:
    print("It is nither even nor odd")
else:
    print("It is odd number")
```

```
22
It is even number
```

In [72]:

```
# iii) WAP to check the Student's Grade.

score = int(input("Enter the student's score (0-100): "))


if score >= 90:
    if score >= 95:
        grade = 'A+'
    else:
        grade = 'A'
elif score >= 80:
    if score >= 85:
        grade = 'B+'
    else:
        grade = 'B'
elif score >= 70:
    if score >= 75:
        grade = 'C+'
    else:
        grade = 'C'
else:
    if score >= 60:
        grade = 'D'
    else:
        grade = 'F'


print(f"The student's grade is: {grade}")
```

```
Enter the student's score (0-100): 68
The student's grade is: D
```

In [2]:

```
# iv)  Given an integer, , perform the following conditional actions:

# If  is odd, print Weird
# If  is even and in the inclusive range of 2 to 5 , print Not Weird
# If  is even and in the inclusive range of 6 to 10, print Weird
# If  is even and greater than 20, print Not Weird

Contraint
1<=n<=100


    n = int(input())

if 1<=n<=100:
    if n%2 != 0:
        print("Weird")
    elif 2<=n<=5 and n%2 == 0:
        print("Not Weird")
    elif 6<=n<=20 and n%2 == 0:
        print("Weird")
    elif n > 20 and n%2 == 0:
        print("Not Weird")
```

```
18
Weird
```

In [68]:

```
# v) The provided code stub reads two integers from STDIN, a and b. Add code to print three lines where:

#The first line contains the sum of the two numbers.
#The second line contains the difference of the two numbers (first - second).
#The third line contains the product of the two numbers.

#if __name__ == '__main__': block. This ensures that the range check for a and b only happens after a and b are a

Constraints

1 <= a <= 10**10
1 <= b <= 10**10

if __name__ == '__main__':
    a = int(input())
    b = int(input())

if 1 <= a <= 10**10 and 1 <= b <= 10**10:
    print(a+b)
    print(a-b)
    print(a*b)
```

```
5
9
14
-4
45
```

# 4. LOOPS

In [88]:

```
# i) WAP to find a number from given Tuple. Find 49.

num =(91,4,9,16,25,36,49,64,81,100)

x = 49

i=0
while i < len(num):
    if(num[i]== x):
        print("Found at index",i)
    i += 1
```

```
Found at index 6
```

In [77]:

```
# ii) WAP to calculate the Multiplication Table of n.

i=1
while i <= 10:
    print(4*i)
    i += 1
```

```
4
8
12
16
20
24
28
32
36
40
```

In [82]:

```
# iii) WAP to Print the given List using a Loop.(We can use this to print a 'name' as well)
```

```
num =[1,4,9,16,25,36,49,64,81,100]

i = 0
while i < len(num):
    print(num[i])
    i += 1
```

```
1
4
9
16
25
36
49
64
81
100
```

In [90]:

```
# iv) WAP using a 'continue' keyword to print all the odd nos from 1-10.

i = 1
while i <= 10:
    if(i%2 == 0):
        i += 1
        continue  ## skip
    print(i)
    i += 1
```

```
1
3
5
7
9
```

In [93]:

```
# v) WAP to print nos 1-10 using a break statement.

i=1
while i <= 10:
    print(i)
    if(i == 8):
        break
    i += 1

print("End of Loop")
```

```
1
2
3
4
5
6
7
8
End of Loop
```

1. Lists, Tuples, Sets, Dictionaries

In [94]:

```
# i) WAP to ask the user to input 3 movies name and store them in a List.


movies = []
movie1=input("Enter the 1st Movie:")
movie2=input("Enter the 2st Movie:")
movie3=input("Enter the 3st Movie:")

movies.append(movie1)
movies.append(movie2)
movies.append(movie3)

print(movies)
```

```
Enter the 1st Movie:Superman
Enter the 2st Movie:Batman
```

```
Enter the 3st Movie:Avengers
['Superman', 'Batman', 'Avengers']
```

In [95]:
```python
# ii)Count the number of students scored grade "A" from given Tuple.

grades = ["C","D","A","A","B","B","A"]

print(grades.count("A"))
```

```
3
```

In [96]:
```python
#iii) WAP for Set (using intersection)

set1={1,3,5,7,9}
set2={3,7,9}

print(set1.intersection(set2))   ##(common no. from both the sets)
```

```
{9, 3, 7}
```

In [97]:
```python
# iv) WAP for Set (using union)
set1={1,3,5,7,9,}
set2={1,2,3,4,5}

print(set1.union(set2))   ##(No duplicate values)
```

```
{1, 2, 3, 4, 5, 7, 9}
```

In [98]:
```python
# v) WAP to enter marks of 3 subjects from user and store it in Dictionary.Use Subject name as Key and marks as V

marks = {}

x= int(input("Enter marks of physics:"))
y= int(input("Enter marks of english:"))
z= int(input("Enter marks of maths:"))

marks.update({"physics": x})
marks.update({"english": y})
marks.update({"maths": z})

print(marks)
```

```
Enter marks of physics:60
Enter marks of english:80
Enter marks of maths:75
{'physics': 60, 'english': 80, 'maths': 75}
```

# 6. Operators

In [99]:
```python
 # Arithmetic Operators

a = 14
b = 3

addition = a + b
subtraction = a - b
multiplication = a * b
division = a / b         # Division (float result)
floor_division = a // b  # Floor Division (integer result)
modulus = a % b          # Modulus (remainder)
exponentiation = a ** b

print(f"Addition: {addition}")
print(f"Subtraction: {subtraction}")
print(f"Multiplication: {multiplication}")
print(f"Division: {division}")              # 4.66666
print(f"Floor Division: {floor_division}")  # 4
print(f"Modulus: {modulus}")                # 2
print(f"Exponentiation: {exponentiation}")
```

```
Addition: 17
Subtraction: 11
Multiplication: 42
Division: 4.666666666666667
Floor Division: 4
Modulus: 2
Exponentiation: 2744
```

# 7. STRINGS

In [100…

```
txt = "The best things in life are free!"
if "free" in txt:
  print("Yes, 'free' is present.")
```

```
Yes, 'free' is present.
```

In [1]:

```
Str="Hello Everyone"
print(Str)
```

```
Hello Everyone
```

In [2]:

```
!pip install Pyppeteer
!pyppeteer-install
```

```
Collecting Pyppeteer
  Downloading pyppeteer-2.0.0-py3-none-any.whl.metadata (7.1 kB)
Requirement already satisfied: appdirs<2.0.0,>=1.4.3 in /opt/anaconda3/lib/python3.12/site-packages (from Pyppete
er) (1.4.4)
Requirement already satisfied: certifi>=2023 in /opt/anaconda3/lib/python3.12/site-packages (from Pyppeteer) (202
4.6.2)
Requirement already satisfied: importlib-metadata>=1.4 in /opt/anaconda3/lib/python3.12/site-packages (from Pyppe
teer) (7.0.1)
Collecting pyee<12.0.0,>=11.0.0 (from Pyppeteer)
  Downloading pyee-11.1.0-py3-none-any.whl.metadata (2.8 kB)
Requirement already satisfied: tqdm<5.0.0,>=4.42.1 in /opt/anaconda3/lib/python3.12/site-packages (from Pyppeteer
) (4.66.4)
Collecting urllib3<2.0.0,>=1.25.8 (from Pyppeteer)
  Downloading urllib3-1.26.19-py2.py3-none-any.whl.metadata (49 kB)
     ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 49.3/49.3 kB 2.0 MB/s eta 0:00:00
Collecting websockets<11.0,>=10.0 (from Pyppeteer)
  Downloading websockets-10.4.tar.gz (84 kB)
     ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 84.9/84.9 kB 6.7 MB/s eta 0:00:00
  Preparing metadata (setup.py) ... done
Requirement already satisfied: zipp>=0.5 in /opt/anaconda3/lib/python3.12/site-packages (from importlib-metadata>
=1.4->Pyppeteer) (3.17.0)
Requirement already satisfied: typing-extensions in /opt/anaconda3/lib/python3.12/site-packages (from pyee<12.0.0
,>=11.0.0->Pyppeteer) (4.11.0)
Downloading pyppeteer-2.0.0-py3-none-any.whl (82 kB)
   ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 82.9/82.9 kB 4.5 MB/s eta 0:00:00
Downloading pyee-11.1.0-py3-none-any.whl (15 kB)
Downloading urllib3-1.26.19-py2.py3-none-any.whl (143 kB)
   ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 143.9/143.9 kB 6.3 MB/s eta 0:00:00
Building wheels for collected packages: websockets
  Building wheel for websockets (setup.py) ... done
  Created wheel for websockets: filename=websockets-10.4-cp312-cp312-macosx_11_0_arm64.whl size=95015 sha256=f802
b98569e2310bec103c74b2a6652be635c95803f1c68a3bb8ab634cfa5289
  Stored in directory: /Users/sujeetnayak/Library/Caches/pip/wheels/80/cf/6d/5d7e4c920cb41925a178b2d2621889c520d6
48bab487b1d7fd
Successfully built websockets
Installing collected packages: websockets, urllib3, pyee, Pyppeteer
  Attempting uninstall: urllib3
    Found existing installation: urllib3 2.2.2
    Uninstalling urllib3-2.2.2:
      Successfully uninstalled urllib3-2.2.2
Successfully installed Pyppeteer-2.0.0 pyee-11.1.0 urllib3-1.26.19 websockets-10.4
[INFO] Starting Chromium download.
100%|████████████████████████████████| 141M/141M [00:20<00:00, 7.01Mb/s]
[INFO] Beginning extraction
[INFO] Chromium extracted to: /Users/sujeetnayak/Library/Application Support/pyppeteer/local-chromium/1181205
```

In [ ]:

8. NUMPY

In [1]:
```
import numpy as np
```

In [19]:
```
# 1) 1-D,2-D,3-D Array in Numpy.

import numpy as np
n = np.array ([1,2,3,4,5])
arr1 = np.array([[1, 2, 3], [4, 5, 6]])
arr2 = np.array([[1, 2, 3], [4, 5, 6],[7,8,9]])
print(n)
print (arr)
print(arr2)
```

```
[1 2 3 4 5]
[[1 2 3]
 [4 5 6]]
[[1 2 3]
 [4 5 6]
 [7 8 9]]
```

In [21]:
```
# 2) ADD 2 elemnets of an Array.

arr = np.array([1, 2, 3, 4])

print(arr[2] + arr[3])
```

```
7
```

In [23]:
```
# 3) Find 5th element of 2nd row.

arr = np.array([[1,2,3,4,5], [6,7,8,9,10]])

print('5th element on 2nd row: ', arr[1, 4])
```

```
5th element on 2nd row:  10
```

In [31]:
```
# 4) From the second element, slice elements from index 1 to index 4 (not included) using step 2:

arr = np.array([[1, 2, 3, 4, 5], [6, 7, 8, 9, 10]])

print(arr[1, 1:4:2]) # skip by 1
```

```
[7 9]
```

In [33]:
```
# 5) we can change the data type of the array.

arr = np.array([1.1, 2.1, 3.1])

newarr = arr.astype(int)  # float to int

print(newarr)
print(newarr.dtype)
```

```
[1 2 3]
int64
```

In [ ]:
```

```

9.PANDAS

In [35]:
```
import pandas as pd
```

In [39]:
```
# 1) create panda series

a = ["Sujeet","NCPL", "5" ]

myvar = pd.Series(a, index = ["Name", "Org", "batch"])  ## we can assign your own labels

print(myvar)
```

```
Name     Sujeet
Org        NCPL
batch         5
dtype: object
```

In [45]:
```
# 2) create a dataframe in pandas

data = {
  "Marks": [80,75,90],
  "Grades": ["B","C","A"]
}
```

```
#load data into a DataFrame object:
df = pd.DataFrame(data, index = ["phy", "Eng", "Maths"])

print(df)
```

```
       Marks Grades
phy       80      B
Eng       75      C
Maths     90      A
```

In [62]:
```
# 3) Import .csv file into Pandas

df = pd.read_csv('My Python Stuff/gender_classification_v7.csv')
df.head()
```

Out[62]:

| | long_hair | forehead_width_cm | forehead_height_cm | nose_wide | nose_long | lips_thin | distance_nose_to_lip_long | gender |
|---|---|---|---|---|---|---|---|---|
| **0** | 1 | 11.8 | 6.1 | 1 | 0 | 1 | 1 | Male |
| **1** | 0 | 14.0 | 5.4 | 0 | 0 | 1 | 0 | Female |
| **2** | 0 | 11.8 | 6.3 | 1 | 1 | 1 | 1 | Male |
| **3** | 0 | 14.4 | 6.1 | 0 | 1 | 1 | 1 | Male |
| **4** | 1 | 13.5 | 5.9 | 0 | 0 | 0 | 0 | Female |

In [64]:
```
print(df.info())
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 5001 entries, 0 to 5000
Data columns (total 8 columns):
 #   Column                    Non-Null Count  Dtype
---  ------                    --------------  -----
 0   long_hair                 5001 non-null   int64
 1   forehead_width_cm         5001 non-null   float64
 2   forehead_height_cm        5001 non-null   float64
 3   nose_wide                 5001 non-null   int64
 4   nose_long                 5001 non-null   int64
 5   lips_thin                 5001 non-null   int64
 6   distance_nose_to_lip_long  5001 non-null   int64
 7   gender                    5001 non-null   object
dtypes: float64(2), int64(5), object(1)
memory usage: 312.7+ KB
None
```

In [ ]:
```
## Data set has 5001 Rows and 8 Colums
#Data info gives us the name of the column and its datatype and non null values in the data.
```

In [72]:
```
pip install -U notebook-as-pdf
```

```
Collecting notebook-as-pdf
  Downloading notebook_as_pdf-0.5.0-py3-none-any.whl.metadata (2.4 kB)
Requirement already satisfied: nbconvert in /opt/anaconda3/lib/python3.12/site-packages (from notebook-as-pdf) (
7.10.0)
Collecting pyppeteer (from notebook-as-pdf)
  Downloading pyppeteer-2.0.0-py3-none-any.whl.metadata (7.1 kB)
Collecting PyPDF2 (from notebook-as-pdf)
  Downloading pypdf2-3.0.1-py3-none-any.whl.metadata (6.8 kB)
Requirement already satisfied: beautifulsoup4 in /opt/anaconda3/lib/python3.12/site-packages (from nbconvert->no
tebook-as-pdf) (4.12.3)
Requirement already satisfied: bleach!=5.0.0 in /opt/anaconda3/lib/python3.12/site-packages (from nbconvert->not
ebook-as-pdf) (4.1.0)
Requirement already satisfied: defusedxml in /opt/anaconda3/lib/python3.12/site-packages (from nbconvert->notebo
ok-as-pdf) (0.7.1)
Requirement already satisfied: jinja2>=3.0 in /opt/anaconda3/lib/python3.12/site-packages (from nbconvert->noteb
ook-as-pdf) (3.1.4)
Requirement already satisfied: jupyter-core>=4.7 in /opt/anaconda3/lib/python3.12/site-packages (from nbconvert-
>notebook-as-pdf) (5.7.2)
Requirement already satisfied: jupyterlab-pygments in /opt/anaconda3/lib/python3.12/site-packages (from nbconver
t->notebook-as-pdf) (0.1.2)
Requirement already satisfied: markupsafe>=2.0 in /opt/anaconda3/lib/python3.12/site-packages (from nbconvert->n
otebook-as-pdf) (2.1.3)
Requirement already satisfied: mistune<4,>=2.0.3 in /opt/anaconda3/lib/python3.12/site-packages (from nbconvert-
>notebook-as-pdf) (2.0.4)
Requirement already satisfied: nbclient>=0.5.0 in /opt/anaconda3/lib/python3.12/site-packages (from nbconvert->n
otebook-as-pdf) (0.8.0)
Requirement already satisfied: nbformat>=5.7 in /opt/anaconda3/lib/python3.12/site-packages (from nbconvert->not
ebook-as-pdf) (5.9.2)
Requirement already satisfied: packaging in /opt/anaconda3/lib/python3.12/site-packages (from nbconvert->noteboo
k-as-pdf) (23.2)
Requirement already satisfied: pandocfilters>=1.4.1 in /opt/anaconda3/lib/python3.12/site-packages (from nbconve
rt->notebook-as-pdf) (1.5.0)
Requirement already satisfied: pygments>=2.4.1 in /opt/anaconda3/lib/python3.12/site-packages (from nbconvert->n
```

```
otebook-as-pdf) (2.15.1)
Requirement already satisfied: tinycss2 in /opt/anaconda3/lib/python3.12/site-packages (from nbconvert->notebook
-as-pdf) (1.2.1)
Requirement already satisfied: traitlets>=5.1 in /opt/anaconda3/lib/python3.12/site-packages (from nbconvert->no
tebook-as-pdf) (5.14.3)
Requirement already satisfied: appdirs<2.0.0,>=1.4.3 in /opt/anaconda3/lib/python3.12/site-packages (from pyppet
eer->notebook-as-pdf) (1.4.4)
Requirement already satisfied: certifi>=2023 in /opt/anaconda3/lib/python3.12/site-packages (from pyppeteer->not
ebook-as-pdf) (2024.7.4)
Requirement already satisfied: importlib-metadata>=1.4 in /opt/anaconda3/lib/python3.12/site-packages (from pypp
eteer->notebook-as-pdf) (7.0.1)
Collecting pyee<12.0.0,>=11.0.0 (from pyppeteer->notebook-as-pdf)
  Downloading pyee-11.1.0-py3-none-any.whl.metadata (2.8 kB)
Requirement already satisfied: tqdm<5.0.0,>=4.42.1 in /opt/anaconda3/lib/python3.12/site-packages (from pyppetee
r->notebook-as-pdf) (4.66.4)
Collecting urllib3<2.0.0,>=1.25.8 (from pyppeteer->notebook-as-pdf)
  Downloading urllib3-1.26.19-py2.py3-none-any.whl.metadata (49 kB)
     ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 49.3/49.3 kB 2.4 MB/s eta 0:00:00
Collecting websockets<11.0,>=10.0 (from pyppeteer->notebook-as-pdf)
  Downloading websockets-10.4.tar.gz (84 kB)
     ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 84.9/84.9 kB 7.0 MB/s eta 0:00:00
  Preparing metadata (setup.py) ... done
Requirement already satisfied: six>=1.9.0 in /opt/anaconda3/lib/python3.12/site-packages (from bleach!=5.0.0->nb
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nbconvert->notebook-as-pdf) (0.5.1)
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>=1.4->pyppeteer->notebook-as-pdf) (3.17.0)
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re>=4.7->nbconvert->notebook-as-pdf) (3.10.0)
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->nbconvert->notebook-as-pdf) (2.16.2)
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7->nbconvert->notebook-as-pdf) (4.19.2)
Requirement already satisfied: typing-extensions in /opt/anaconda3/lib/python3.12/site-packages (from pyee<12.0.
0,>=11.0.0->pyppeteer->notebook-as-pdf) (4.11.0)
Requirement already satisfied: soupsieve>1.2 in /opt/anaconda3/lib/python3.12/site-packages (from beautifulsoup4
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6->nbformat>=5.7->nbconvert->notebook-as-pdf) (23.1.0)
Requirement already satisfied: jsonschema-specifications>=2023.03.6 in /opt/anaconda3/lib/python3.12/site-packag
es (from jsonschema>=2.6->nbformat>=5.7->nbconvert->notebook-as-pdf) (2023.7.1)
Requirement already satisfied: referencing>=0.28.4 in /opt/anaconda3/lib/python3.12/site-packages (from jsonsche
ma>=2.6->nbformat>=5.7->nbconvert->notebook-as-pdf) (0.30.2)
Requirement already satisfied: rpds-py>=0.7.1 in /opt/anaconda3/lib/python3.12/site-packages (from jsonschema>=2
.6->nbformat>=5.7->nbconvert->notebook-as-pdf) (0.10.6)
Requirement already satisfied: python-dateutil>=2.8.2 in /opt/anaconda3/lib/python3.12/site-packages (from jupyt
er-client>=6.1.12->nbclient>=0.5.0->nbconvert->notebook-as-pdf) (2.9.0.post0)
Requirement already satisfied: pyzmq>=23.0 in /opt/anaconda3/lib/python3.12/site-packages (from jupyter-client>=
6.1.12->nbclient>=0.5.0->nbconvert->notebook-as-pdf) (25.1.2)
Requirement already satisfied: tornado>=6.2 in /opt/anaconda3/lib/python3.12/site-packages (from jupyter-client>
=6.1.12->nbclient>=0.5.0->nbconvert->notebook-as-pdf) (6.4.1)
Downloading notebook_as_pdf-0.5.0-py3-none-any.whl (6.5 kB)
Downloading pypdf2-3.0.1-py3-none-any.whl (232 kB)
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Downloading pyppeteer-2.0.0-py3-none-any.whl (82 kB)
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Downloading pyee-11.1.0-py3-none-any.whl (15 kB)
Downloading urllib3-1.26.19-py2.py3-none-any.whl (143 kB)
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Building wheels for collected packages: websockets
  Building wheel for websockets (setup.py) ... done
  Created wheel for websockets: filename=websockets-10.4-cp312-cp312-macosx_11_0_arm64.whl size=95015 sha256=348
df5b70783b632b77c917d1956542b42514a6cf38df287429dfb9a7dd76552
  Stored in directory: /Users/sam/Library/Caches/pip/wheels/80/cf/6d/5d7e4c920cb41925a178b2d2621889c520d648bab48
7b1d7fd
Successfully built websockets
Installing collected packages: websockets, urllib3, PyPDF2, pyee, pyppeteer, notebook-as-pdf
  Attempting uninstall: urllib3
    Found existing installation: urllib3 2.2.2
    Uninstalling urllib3-2.2.2:
      Successfully uninstalled urllib3-2.2.2
Successfully installed PyPDF2-3.0.1 notebook-as-pdf-0.5.0 pyee-11.1.0 pyppeteer-2.0.0 urllib3-1.26.19 websockets
-10.4
Note: you may need to restart the kernel to use updated packages.
```

In [ ]: