…………………………………………………………………….Assignment………………………………………………………………

1. Write a python program to read the radius from the below.csv file and then Calculate the Area of a Circle using SciPy Constants. After that display the first 5 records and also save the calculated result into a new.csv file.

Input:

https://raw.githubusercontent.com/AnudipAE/DANLC/master/radius\_data.csv

//code

import pandas as pd

from scipy.constants import pi

# Load the data from the provided URL

url = "https://raw.githubusercontent.com/AnudipAE/DANLC/master/radius\_data.csv"

df = pd.read\_csv(url)

# Calculate the area of a circle using the radius values

df['Area'] = pi \* df['Radius'] \*\* 2

# Display the first 5 records

first\_5\_records = df.head()

print(first\_5\_records)

# Save the calculated result into a new CSV file

output\_file = "circle\_areas.csv"

df.to\_csv(output\_file, index=False)

output:

CircleName Radius Area

0 SAY 3.798717 45.333960

1 PSN 9.958397 311.550720

2 JDP 5.142711 83.087197

3 AUO 3.319584 34.619210

4 OHG 1.138395 4.071325

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2. Write a python program to read the GB from the below .csv file and then Convert GB to MB using SciPy Constants. After that display the first 5 records and also save the calculated result into a new csv file.

Input: https://raw.githubusercontent.com/AnudipAE/DANLC/master/file\_size.csv

//code

import pandas as pd

# Load the data from the provided URL

url = "https://raw.githubusercontent.com/AnudipAE/DANLC/master/file\_size.csv"

df = pd.read\_csv(url)

# Convert GB to MB (1 GB = 1000 MB)

df['Size\_MB'] = df['Size\_GB'] \* 1000

# Display the first 5 records

first\_5\_records = df.head()

print(first\_5\_records)

# Save the calculated result into a new CSV file

output\_file = "file\_size\_mb.csv"

df.to\_csv(output\_file, index=False)

output:

First 5 Records:

Filename Size (GB) Size (MB)

0 file\_1.txt 9.72 9720.0

1 file\_2.txt 9.81 9810.0

2 file\_3.txt 5.61 5610.0

3 file\_4.txt 4.58 4580.0

4 file\_5.txt 5.52 5520.0

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