Rama decide to walk 1000 steps every day to come back to the effect that lockdown as add on his body agility, mobility, flexibility, and strength.

Consider the Following data from fitness data tracker over a period of 10 days

|  |  |
| --- | --- |
| Day Number | Steps Walked |
| 1 | 6012 |
| 2 | 4079 |
| 3 | 6386 |
| 4 | 5230 |
| 5 | 4598 |
| 6 | 5564 |
| 7 | 6971 |
| 8 | 7763 |
| 9 | 8032 |
| 10 | 8569 |

1. Represent the above data in 10\*2 arrays.in each row the first element should contain Day Numbers and second element should contain steps walked
2. Rama Notice that the trackers the battery die everyday at 7:00 pm. Rama discover that on an average he walks two thousand steps every day after 7:00pm.perform an appropriated
3. Write a program that returns the steps walked if the steps walked more than 9000
4. Print an array containing in sorted order

# import numpy as np

data=np.array([[1,6012],[2,4079],[3,6386],[4,5230],[5,4598],[6,5564],[7,6971],[8,7763],[9,8032],[10,8569]])

print(data)

#Rama walks 2000 steps every day after 7:00pm

average\_step\_after\_7pm=2000

#Write a programm that returns that steps walked if the steps walked are more than 9000

steps\_walked=data[:,1]

steps\_walked\_more\_than\_9000=steps\_walked[steps\_walked > 7000]

print("Number of Persons:",len(steps\_walked\_more\_than\_9000))

#print an array containing steps walked in sorted order

sorted\_steps\_walked=np.sort(steps\_walked)

print("The sorted form of step walked:",sorted\_steps\_walked)

#perform appropriate operation to add 1000 steps to all the observation using pandas

import pandas as pd

data\_df=pd.DataFrame(data,columns=['Day Number','Steps\_Walked'])

data\_df["After adding 1000 steps"]=data\_df["Steps\_Walked"]+1000

print(data\_df)

#Find out the day on which he walked more than 7000 steps using pandas

more\_than\_7000=data\_df[data\_df["After adding 1000 steps"] > 7000]

print(more\_than\_7000)