Assignment

**Name**:M.gnana sai likhitha

Code:

import os

import json

class Student:

def \_\_init\_\_(self, roll\_no, name, marks):

self.roll\_no = roll\_no

self.name = name

self.marks = marks

def display(self):

print(f"Roll No: {self.roll\_no}, Name: {self.name}, Marks: {self.marks}")

def to\_dict(self):

return {

'roll\_no': self.roll\_no,

'name': self.name,

'marks': self.marks

}

@staticmethod

def from\_dict(data):

return Student(data['roll\_no'], data['name'], data['marks'])

def add\_student():

roll\_no = int(input("Enter Roll No: "))

name = input("Enter Name: ")

marks = float(input("Enter Marks: "))

student = Student(roll\_no, name, marks)

students = []

if os.path.exists("students.json"):

with open("students.json", "r") as f:

students = json.load(f)

students.append(student.to\_dict())

with open("students.json", "w") as f:

json.dump(students, f, indent=4)

print("Student record added successfully.\n")

def display\_all():

if not os.path.exists("students.json"):

print("No records found.\n")

return

with open("students.json", "r") as f:

students = json.load(f)

for data in students:

student = Student.from\_dict(data)

student.display()

def search\_student():

roll = int(input("Enter roll number to search: "))

if not os.path.exists("students.json"):

print("No records found.\n")

return

with open("students.json", "r") as f:

students = json.load(f)

for data in students:

if data['roll\_no'] == roll:

student = Student.from\_dict(data)

student.disp()

output:

