class Task:

def \_\_init\_\_(self, task\_name, date, completed=False):

self.task\_name = task\_name

self.date = date

self.completed = completed

class TaskManager:

def \_\_init\_\_(self):

self.tasks = []

def add\_task(self, task\_name, date):

task = Task(task\_name, date)

self.tasks.append(task)

def update\_task(self, task\_name, date, completed):

for task in self.tasks:

if task.task\_name == task\_name and task.date == date:

task.completed = completed

return True

return False

def view\_percentage\_completed(self, date):

completed\_tasks = sum(1 for task in self.tasks if task.date == date and task.completed)

total\_tasks = sum(1 for task in self.tasks if task.date == date)

if total\_tasks == 0:

return 0.0

return (completed\_tasks / total\_tasks) \* 100

def delete\_task(self, task\_name, date):

self.tasks = [task for task in self.tasks if not (task.task\_name == task\_name and task.date == date)]

# Sample usage:

task\_manager = TaskManager()

while True:

print("Options:")

print("1. Add Task")

print("2. Update Task Completion Status")

print("3. View Percentage Completed for a Date")

print("4. Delete Task")

print("5. Exit")

choice = input("Enter your choice: ")

if choice == "1":

task\_name = input("Enter task name: ")

date = input("Enter date (YYYY-MM-DD): ")

task\_manager.add\_task(task\_name, date)

print("Task added!")

elif choice == "2":

task\_name = input("Enter task name: ")

date = input("Enter date (YYYY-MM-DD): ")

completed = input("Is the task completed? (yes/no): ").lower()

completed = True if completed == "yes" else False

if task\_manager.update\_task(task\_name, date, completed):

print("Task updated!")

else:

print("Task not found!")

elif choice == "3":

date = input("Enter date (YYYY-MM-DD): ")

percentage = task\_manager.view\_percentage\_completed(date)

print(f"Percentage of tasks completed on {date}: {percentage}%")

elif choice == "4":

task\_name = input("Enter task name: ")

date = input("Enter date (YYYY-MM-DD): ")

task\_manager.delete\_task(task\_name, date)

print("Task deleted!")

elif choice == "5":

break