ASSIGNMENT-DAY 2- 11/03/2025

1. **Perform Crud operation in an array**

Solution:

data = []

def create():

n = int(input("Enter the number of elements to add: "))

for \_ in range(n):

element = input("Enter element: ")

data.append(element)

print("Elements added successfully!")

def read():

if not data:

print("Array is empty!")

else:

print("Current array elements:", data)

def update():

read()

if data:

index = int(input("Enter the index of the element to update: "))

if 0 <= index < len(data):

new\_value = input("Enter the new value: ")

data[index] = new\_value

print("Element updated successfully!")

else:

print("Invalid index!")

def delete():

read()

if data:

index = int(input("Enter the index of the element to delete: "))

if 0 <= index < len(data):

removed\_element = data.pop(index)

print(f"Element '{removed\_element}' deleted successfully!")

else:

print("Invalid index!")

while True:

print("\nCRUD Operations Menu:")

print("1. Create (Add Elements)")

print("2. Read (Display Elements)")

print("3. Update an Element")

print("4. Delete an Element")

print("5. Exit")

choice = input("Enter your choice: ")

if choice == '1':

create()

elif choice == '2':

read()

elif choice == '3':

update()

elif choice == '4':

delete()

elif choice == '5':

print("Exiting program. Goodbye!")

break

else:

print("Invalid choice! Please enter a valid option.")

**2.Take user input of numbers to perform linear search in an array or list**

Solution:

def linear\_search(arr,element):

for i in range(len(arr)):

if arr[i]==element:

return i

return -1

n=list(map(int,input("enter the elements:").split()))

m=int(input("enter the element to be searched:"))

print(linear\_search(n,m))

2. Take user input of numbers to perform linear search in an array or list

def linear\_search(arr,element):

for i in range(len(arr)):

if arr[i]==element:

return i

return -1

n=list(map(int,input("enter the elements:").split()))

m=int(input("enter the element to be searched:"))

print(linear\_search(n,m))