**ASSIGNMENT NO 2  
TITLE: Create ADT to implements set concept..**

Code:def get\_set\_input(set\_name):

size = int(input(f"Enter the number of elements for Set {set\_name}: "))

new\_set = set()

print(f"Enter {size} elements for Set {set\_name} (letters, numbers, or words allowed):")

for \_ in range(size):

element = input().strip()

new\_set.add(element)

return new\_set

def add\_element(s, set\_name):

element = input(f"Enter an element to add to Set {set\_name}: ").strip()

s.add(element)

print(f"Updated Set {set\_name}: {s}")

def remove\_element(s, set\_name):

element = input(f"Enter an element to remove from Set {set\_name}: ").strip()

if element in s:

s.remove(element)

print(f"Updated Set {set\_name}: {s}")

else:

print(f"Element not found in Set {set\_name}.")

def menu(A, B):

while True:

print("\n-------- MENU --------")

print("1. Union of Set A and B")

print("2. Intersection of Set A and B")

print("3. Difference (A - B)")

print("4. Add element to Set A")

print("5. Add element to Set B")

print("6. Remove element from Set A")

print("7. Remove element from Set B")

print("8. Exit")

try:

choice = int(input("Enter your choice (1-8): "))

except ValueError:

print("Please enter a valid number.")

continue

if choice == 1:

print("Union:", A.union(B))

elif choice == 2:

print("Intersection:", A.intersection(B))

elif choice == 3:

print("Difference (A - B):", A.difference(B))

elif choice == 4:

add\_element(A, "A")

elif choice == 5:

add\_element(B, "B")

elif choice == 6:

remove\_element(A, "A")

elif choice == 7:

remove\_element(B, "B")

elif choice == 8:

print("Exiting program.")

break

else:

print("Invalid choice. Please select from 1 to 8.")

# Main Program Starts Here

print("Set Operations Program (Supports Alphabets, Words, Numbers)")

A = get\_set\_input("A")

print("Set A:", A)

B = get\_set\_input("B")

print("Set B:", B)

menu(A, B)

output:  
  