def createset():

n = int(input("Enter the number of elements you want to insert: "))

s = set()

for i in range(n):

element = int(input(f"Enter the {i + 1} element: "))

s.add(element)

return s

def Insertele(s):

element = int(input("Enter the element you want to insert: "))

s.add(element)

print(s)

def Deleteele(s):

element = int(input("Enter the element you want to remove: "))

if element in s:

s.remove(element)

print("Element Removed from set")

else:

print("Element Not Found in set")

print(s)

def Searchele(s):

element = int(input("Enter the element to search: "))

if element in s:

print("Element found in set")

else:

print("Element not found in set")

def Setsize(s):

print("Size of the set:", len(s))

def operation(n, set1, set2):

if n == 5:

print("Union of sets:", set1.union(set2))

elif n == 6:

print("Intersection of sets:", set1.intersection(set2))

elif n == 7:

print("Difference of sets:", set1.difference(set2))

elif n == 8:

if set2.issubset(set1):

print("Set B is a subset of Set A")

else:

print("Set B is not a subset of Set A")

s1 = createset()

while True:

print("\nOptions:")

print("1. Add element")

print("2. Remove element")

print("3. Search element")

print("4. Size of set")

print("5. Union of sets")

print("6. Intersection of sets")

print("7. Difference of sets")

print("8. Check subset")

print("9. Exit")

choice = int(input("Enter your choice: "))

if choice == 9:

print("Exiting the program.")

break

elif choice == 1:

Insertele(s1)

elif choice == 2:

Deleteele(s1)

elif choice == 3:

Searchele(s1)

elif choice == 4:

Setsize(s1)

elif 5 <= choice <= 8:

print("\tEnter the data of second set.")

s2 = createset()

operation(choice, s1, s2)

else:

print("Invalid choice.")