

```

def main():

    set1 = set()

    set2 = set()


    while True:

        print("\n---- SET OPERATIONS ----\n")

        choice = int(input("1: Insert \n2: Size \n3: Remove \n4: Contains \n5: Union \n6: Intersection
\n7: Subset \n8: Difference \n9: Exit\nEnter Your Choice: "))


        if choice == 1:

            n1 = int(input("Enter the number of elements in set 1: "))

            for i in range(n1):

                data_name = input("Enter element for set 1: ")

                set1.add(data_name)


            n2 = int(input("\nEnter the number of elements in set 2: "))

            for i in range(n2):

                data_name = input("Enter element for set 2: ")

                set2.add(data_name)


            print("Set 1:", set1)

            print("Set 2:", set2)


        elif choice == 2:

            print("Size of set 1:", len(set1))

            print("Size of set 2:", len(set2))


        elif choice == 3:

            print('Remove element from which set? (1 for set 1, 2 for set 2)')

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

```

```
if inp == 1:
    if set1:
        set1.pop()
        print("Updated Set 1:", set1)
    else:
        print("Set 1 is empty.")
```

```
elif inp == 2:
    if set2:
        set2.pop()
        print("Updated Set 2:", set2)
    else:
        print("Set 2 is empty.")
```

```
else:
    print("Invalid input!")
```

```
elif choice == 4:
    ip = input("Enter element you want to check: ")
    if ip in set1:
        print("Set 1 contains the element:", ip)
    if ip in set2:
        print("Set 2 contains the element:", ip)
    if ip not in set1 and ip not in set2:
        print("Element not found in either set.")
```

```
elif choice == 5:
    print("Union:", set1.union(set2))
```

```
elif choice == 6:
    print("Intersection:", set1.intersection(set2))
```

```
elif choice == 7:
```

```
if set1.issubset(set2):  
    print("Set 1 is a subset of Set 2")  
else:  
    print("Set 1 is not a subset of Set 2")
```

```
elif choice == 8:  
    differ = set2.difference(set1)  
    print("Difference (Set2 - Set1):", differ)
```

```
elif choice == 9:  
    print("Terminated successfully.")  
    break
```

```
else:  
    print("Invalid choice! Please enter a number between 1 and 9.")
```

```
# Run the main function  
main()
```