Practical 4 Demonstrate the use of data structures Set

```
# Sub : Essential Technologies for Data Science
# Name: Kunal Tushar Mahale
# Msc Data Science
# Practical 4
```

```
# Rinkey is Hosting B.day party
```

Rinkey is hosting a birthday party and has a list of guests who confirmed their attendance. However she wants to ensure each guest is listed only once and needs to remove a particular guest who has now declined. Rinkey wants the final list of unique attendees minus the declined one to be displayed in the same order they originally appeared.

Help Rinkey write a Python program that:

1. takes a list of guest ids (integers) as input.
2. removes duplicates using set() function and stores unique guest ids.
3. Renoves a specified guest ID from the set if present.
4. Displays the resulting unique guest list in the order of original appearance.

```
def main():
    print("Welcome to Rinkey's Birthday Party Guest Manager")

    # Step 1: Take input from user
    print("Enter guest IDs (separated by spaces: ' '):")
    guest_input = input("Guest IDs: ")
    guest_ids = list(map(int, guest_input.split()))

    print(f"Original guest list: {guest_ids}")

    # Step 2: Remove duplicates using set()
    unique_guests = set(guest_ids)
    print(f"Clear guest list: {unique_guests}")

    # Get the declined guest ID
    declined_id = int(input("Enter the guest ID who declined: "))

    # Step 3: Remove declined guest if present
    if declined_id in unique_guests:
        unique_guests.remove(declined_id)

    # Step 4: Maintain original order
    print(f"Final unique guest list: {unique_guests}")


if __name__ == "__main__":
    main()
```

```
Welcome to Rinkey's Birthday Party Guest Manager
Enter guest IDs (separated by spaces: ' '):
Guest IDs: 10 12 10 13
Original guest list: [10, 12, 10, 13]
Clear guest list: {10, 12, 13}
Enter the guest ID who declined: 13
Final unique guest list: {10, 12}
```