| Course Outcomes (CO) | LO1 | LO2 | LO3 |
|---|---|---|---|
| CO1 | | | |
| CO2 | √ | √ | √ |
| CO3 | | | |

Given the following `Friend` and `LinkedList` ADT

```
public class Friend
{
        private int idno;
        private String name, hpno, email;

        public Friend (int id, String n, String hp, String em) {…}
        public int getId() {…}
        public String getName() {…}
        public String getHP() {…{
        public String getEmail() {…}
        public void setName(String n) {…}
        public void setHP(String hp) {…}
        public void setEmail(String mail) {…}

}

public class LinkedList
{
        public LinkedList();
        public int size();
        public void add(int index, Object element);
        public Object get(int index);
        public Object set(int index, Object element);
        public Object remove(int index)
}
```

Write a Java program to:

1.  Write a complete program of `Friend` class.

2.  Write an application program by implementing a **MENU SELECTION** to do the following tasks.

    a.  Create a linked list named `sList` then insert some records (identify by the user) into `sList`. Verify each record to ensure that there is no duplicate record.

    b.  Ask user to enter id no for viewing the record. If the record exists the view it on the screen otherwise display an appropriate message

    c.  Remove the record form the `sList`. If the `slist` is empty or has only one record then, display an appropriate message.

d. Update record that it's based on `idno` given by the user. If the record exists replace its value of `hpno` and `email` also given by the user, otherwise display an appropriate message.

e. To print all record from the `sList`.