

/*Date: 22-7-25

Scenario: College Exam Paper Collection

During semester exams, invigilators collect answer scripts from students. Each script is placed on top of a stack on the exam supervisor's desk. The last script collected must be evaluated first, following the Last-In-First-Out (LIFO) order.

Design and implement this answer script collection system using a linked list-based stack in Java.

Operations to Implement:

- Push: Add a newly collected answer script to the top of the stack.
- Pop: Remove and process the top answer script (the one to be evaluated first).
- Peek: View the most recently collected script (without removing it).
- Display: Print all collected scripts from top to bottom.

Data to Store per Script:

- scriptID (e.g., "EX123")
- studentName (e.g., "Priya Sharma")*/

```
package julyhometask;
```

```
import java.util.*;
```

```
class CollegeNode
```

```
{
```

```
    String sc_id;
```

```
    String stu_name;
```

```
    CollegeNode next;
```

```
    CollegeNode(String sc_id,String stu_name)
```

```
    {
```

```
        this.sc_id=sc_id;
```

```
        this.stu_name=stu_name;
```

```
        this.next=null;
```

```
    }
```

```
}
```

```
public class july22ht
```

```
{
```

```

CollegeNode top;

july22ht()
{
    this.top=null;
}

public void push(String sc_id,String stu_name)
{
    CollegeNode newNode=new CollegeNode(sc_id,stu_name);
    newNode.next=top;
    top=newNode;

    System.out.println("The recently submitted answer sheet with id "+sc_id+" and
name "+stu_name+" is placed at first");

}

public void pop()
{
    if(top==null)
    {
        System.out.println("There are no answer sheets left");
        return;
    }

    String topID=top.sc_id;
    String topName=top.stu_name;
    top=top.next;

    System.out.println("The answer sheet of "+ topName+" with id "+topID+" is
evaluated firstly");
}

String[]peek()
{
    if(top==null)
    {
        System.out.println("There are no answer sheets left behind");
    }
}

```

```

        return new String[]{"-1"};

    }

    String[]data= {top.sc_id,top.stu_name};
    return data;
    }

public void display()
{
    System.out.println("The available answer sheets for correction are");
    CollegeNode temp=top;
    while(temp!=null)
    {
        System.out.println("ID:"+temp.sc_id+" Name:"+temp.stu_name);
        temp=temp.next;
    }
    System.out.println("There are no answer sheets left behind");
}

public static void main(String[] args)
{
    Scanner sc=new Scanner(System.in);
    july22ht as=new july22ht();
    int choice;
    do
    {

        System.out.println("1.Place the recent submitted sheets\n2.Evaluate the current top
sheet\n3.See the current top sheet\n4.Display all sheets\n5.Exit");
        choice=sc.nextInt();
    }
}

```

```

sc.nextLine();
switch(choice)
{
case 1:
    System.out.println("Enter the answer sheet id");
    String sc_id=sc.nextLine();
    System.out.println("Enter the name of the student");
    String stu_name=sc.nextLine();
    as.push(sc_id,stu_name);
    break;
case 2:
    as.pop();
    break;
case 3:
    String[]data=as.peek();
    System.out.println("ID:"+data[0]+" Name:"+data[1]);

    break;
case 4:
    as.display();
    break;
case 5:
    System.out.println("The system is exiting---");
    break;
default:
    System.out.println("Please enter valid option");
    break;
}
}while(choice!=5);
sc.close();
}

```

