import java.util.\*;

interface Stack{

void push(String item);

String pop();

String peek();

boolean isEmpty();

}

class ArrayStack implements Stack{

private String[]elements=new String[10];

private int top=-1;

public void push(String item){

if(top==elements.length-1){

System.out.println("Stack is Full!can't push");

return;

}

elements[++top]=item;

}

public String pop(){

if(isEmpty()){

System.out.println("Stack is Empty!nothing to undo");

return null;

}

return elements[top--];

}

public String peek(){

if(isEmpty())return null;

return elements[top];

}

public boolean isEmpty(){

return top==-1;

}

}

public class TextEditorUndo{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

Stack undoStack = new ArrayStack();

while(true){

System.out.println("\n---Text Editor---");

System.out.println("1.Type text");

System.out.println("2.Undo");

System.out.println("3.View current text");

System.out.println("4.Exit");

System.out.println("Enter Choice:");

int choice=sc.nextInt();

sc.nextLine();

switch(choice){

case 1:

System.out.println("Enter Text:");

String text=sc.nextLine();

undoStack.push(text);

break;

case 2:

String undone=undoStack.pop();

if(undone!=null){

System.out.println("Undo:"+undone);

}

break;

case 3:

String current=undoStack.peek();

System.out.println("Current Text:"+(current!=null?current:"No Text"));

break;

case 4:

System.out.println("Exiting...");

sc.close();

return;

default:

System.out.println("Invalid Choice!Try Again");

}

}

}

}

Output:

---Text Editor---

1.Type text

2.Undo

3.View current text

4.Exit

Enter Choice:

1

Enter Text:

Hello

---Text Editor---

1.Type text

2.Undo

3.View current text

4.Exit

Enter Choice:

1

Enter Text:

World

---Text Editor---

1.Type text

2.Undo

3.View current text

4.Exit

Enter Choice:

3

Current Text: World

---Text Editor---

1.Type text

2.Undo

3.View current text

4.Exit

Enter Choice:

2

Undo: World

---Text Editor---

1.Type text

2.Undo

3.View current text

4.Exit

Enter Choice:

3

Current Text: Hello

---Text Editor---

1.Type text

2.Undo

3.View current text

4.Exit

Enter Choice:

2

Undo: Hello

---Text Editor---

1.Type text

2.Undo

3.View current text

4.Exit

Enter Choice:

3

Current Text: No Text

---Text Editor---

1.Type text

2.Undo

3.View current text

4.Exit

Enter Choice:

4

Exiting...