```
import java.util.*;
interface stack{
void push(int data);
void pop();
void disp();
boolean isEmpty();
boolean isFull();
}
class isFull extends Exception{
public isFull(String s){
super(s);
}
class isEmpty extends Exception{
public isEmpty(String s){
super(s);
}
class inter implements stack{
int top=-1;
int elements[]=new int[5];
public boolean isFull(){
if(top==elements.length-1)
return true;
else
return false;
}
```

```
public boolean isEmpty(){
if(top==-1)
return true;
else
return false;
}
public void push(int data){
try{
if(!isFull())
elements[++top]=data;
else
throw new isFull("Stack is Full");
}
catch(isFull e){
System.out.println("Exception : "+e);
public void pop(){
try{
if(!isEmpty())
top--;
else
throw new isEmpty("Stack is Empty");
}
catch(isEmpty e){
System.out.println("Exception : "+e);
}}
```

```
public void disp(){
       try{
if(!isEmpty()){
for(int i=0;i \le top;i++){
System.out.println(elements[i]);
}
else
throw new isEmpty("Stack is Empty");
}
catch(isEmpty e){
System.out.println("Exception : "+e);
}}}
class Main{
public static void main(String args[]){
Scanner s=new Scanner(System.in);
inter i=new inter();
int ch,data;
System.out.println("Enter your choice:
\n1.Push\n2.Pop\n3.Display\n4.Exit\n");
ch=s.nextInt();
while(ch<4){
switch(ch){
case 1:
System.out.println("Enter any element\n");
data=s.nextInt();
i.push(data);
```

```
break;
case 2:
i.pop();
break;
case 3:
i.disp();
break;
}
System.out.println("Enter your choice : \n1.Push\n2.Pop\n3.Display\n4.Exit");
ch=s.nextInt();
}}}
```

