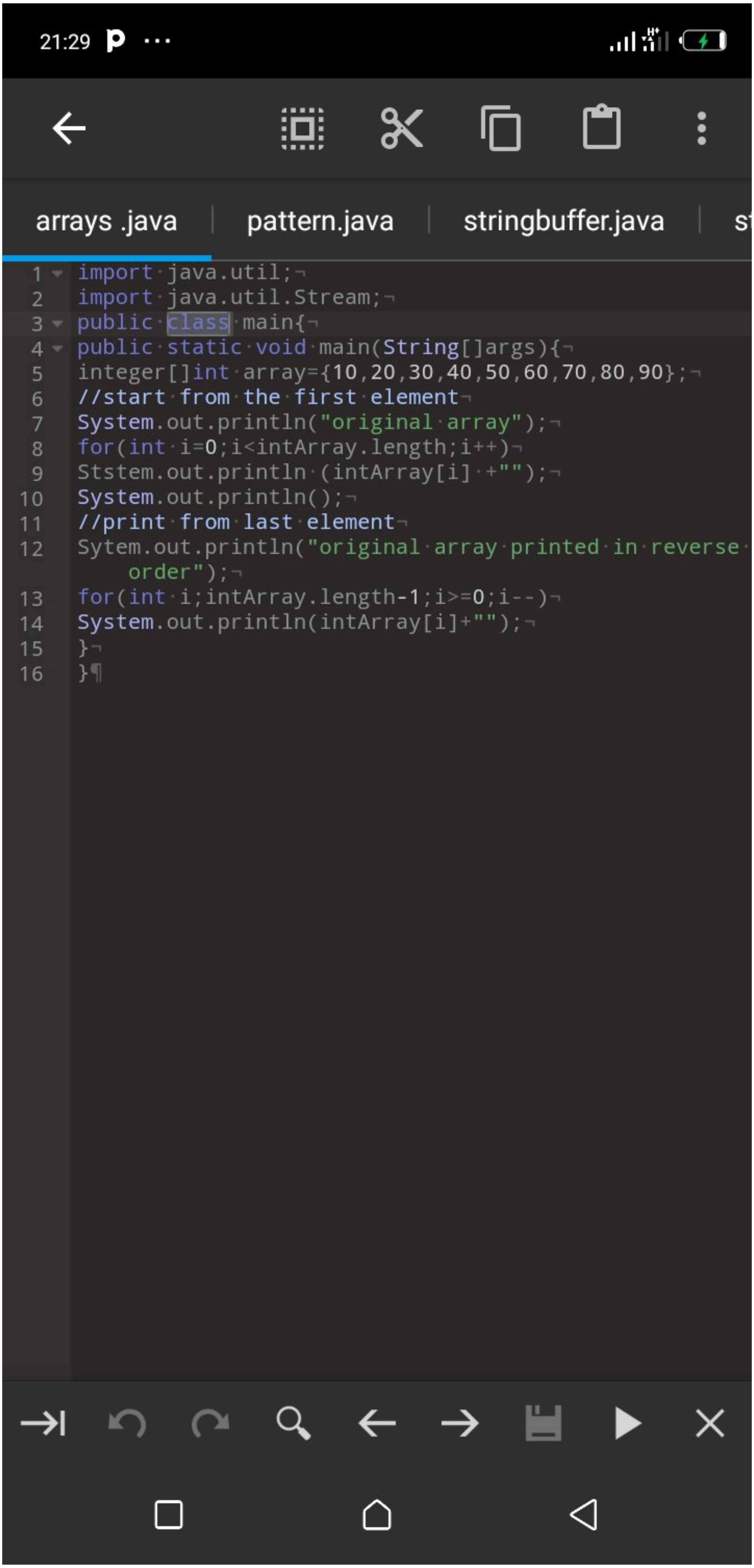
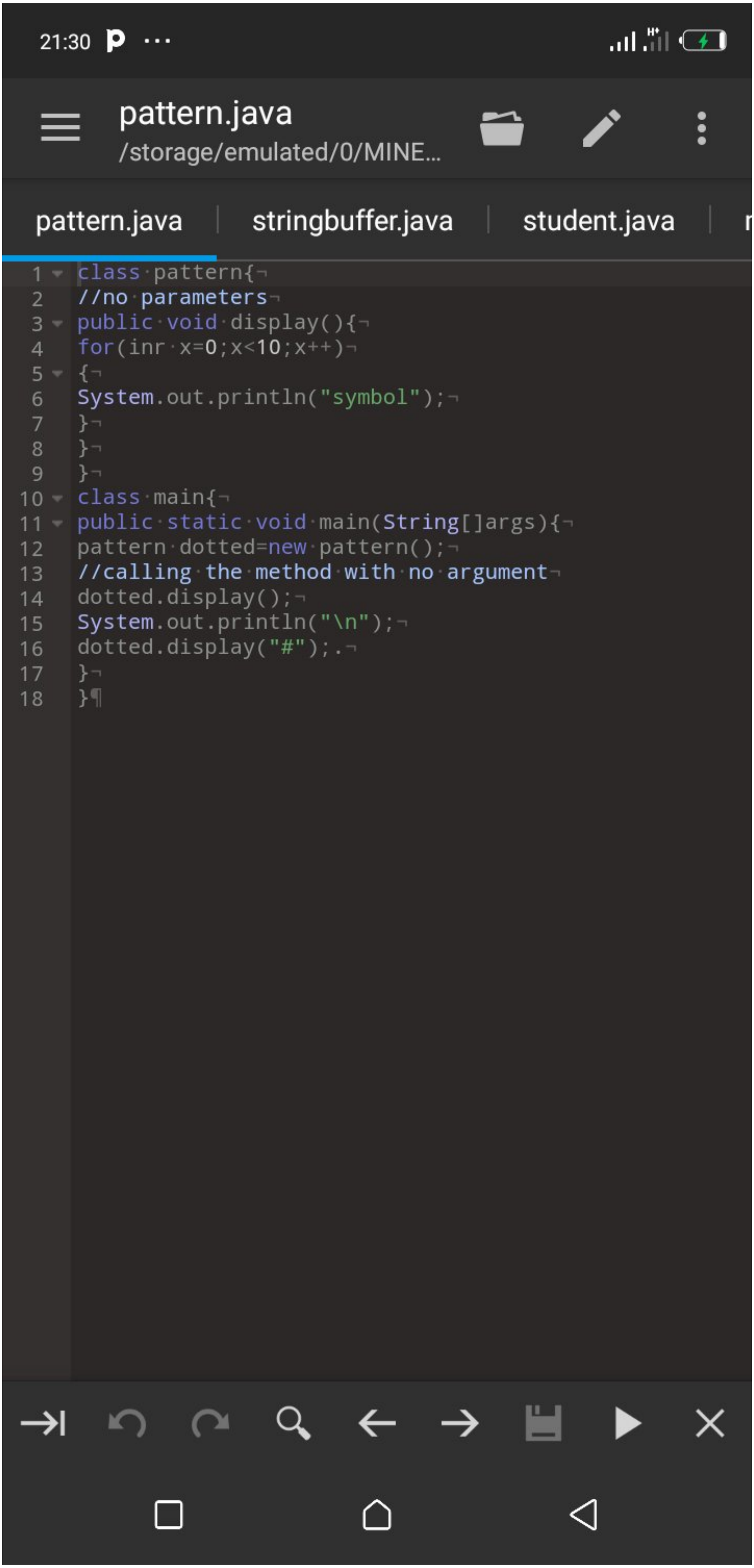
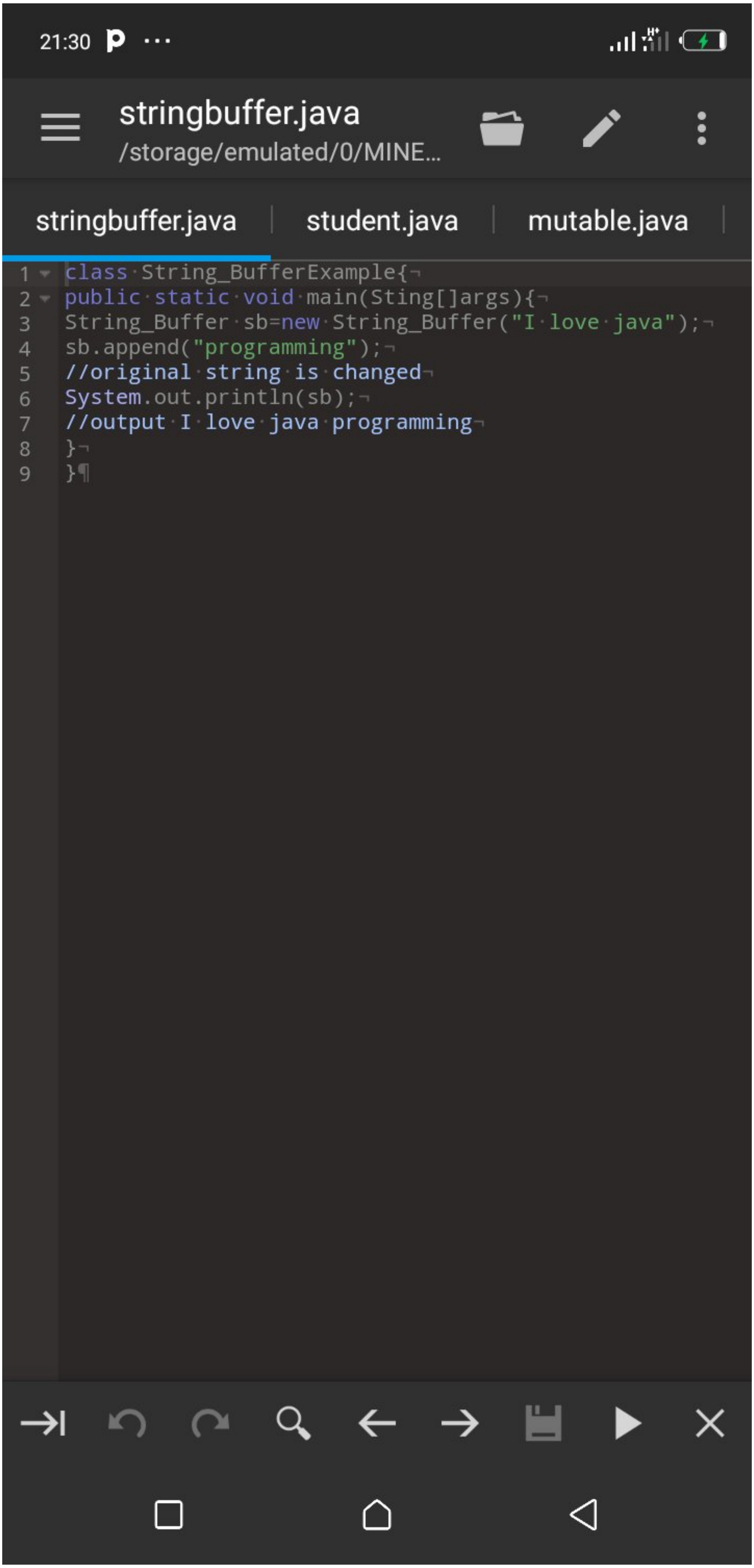

21:29
arrays .java
pattern.java
stringbuffer.java
st

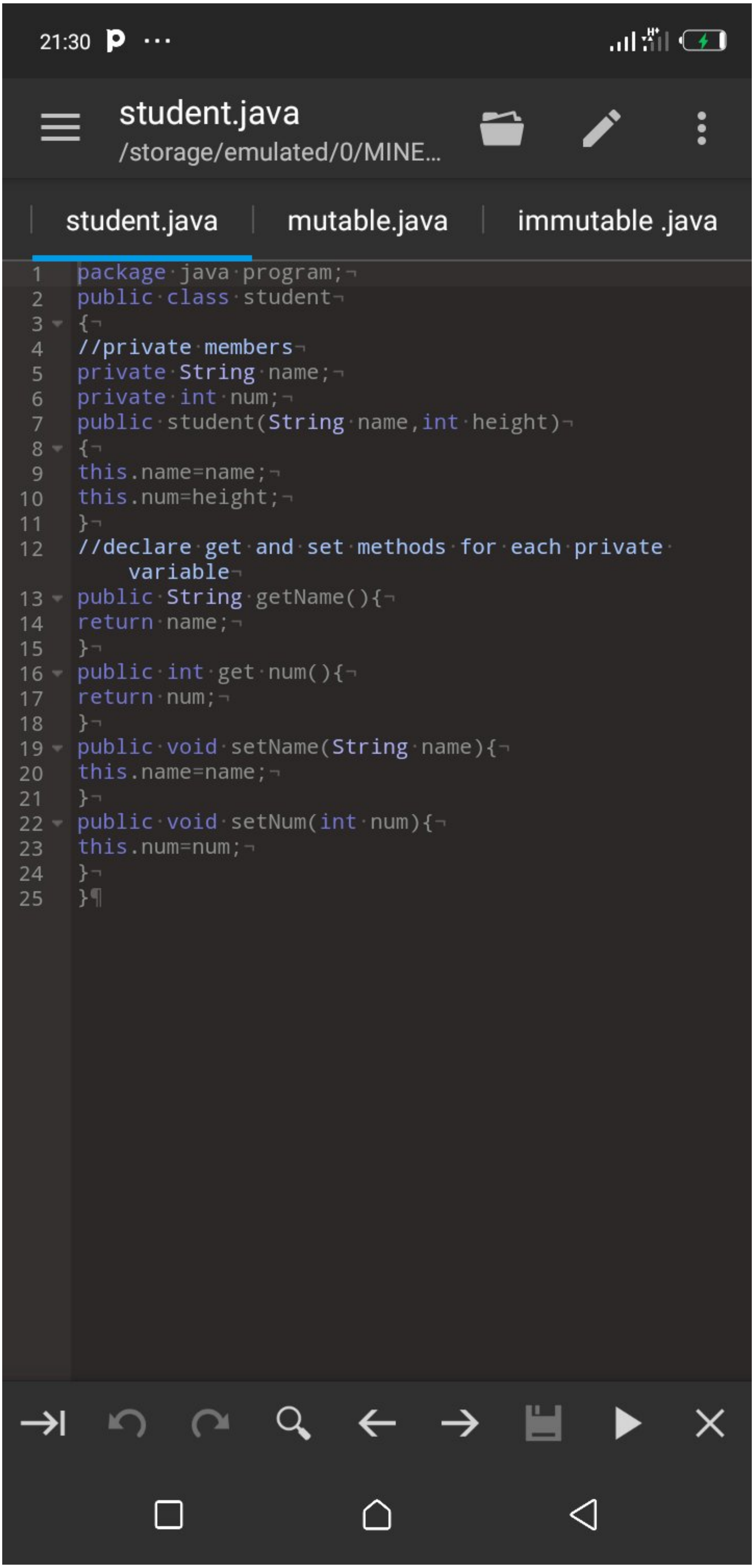
```
import java.util;
import java.util.Stream;
public class main{
public static void main(String[]args){
integer[]int array={10,20,30,40,50,60,70,80,90};
//start from the first element
System.out.println("original array");
for(int i=0;i<intArray.length;i++)
Ststem.out.println (intArray[i] +"");
System.out.println();
//print from last element
Sytem.out.println("original array printed in reverse order");
for(int i;intArray.length-1;i>=0;i--)
System.out.println(intArray[i]+"");
}
}
```


21:30
pattern.java
/storage/emulated/0/MINE...
pattern.java
stringbuffer.java
student.java

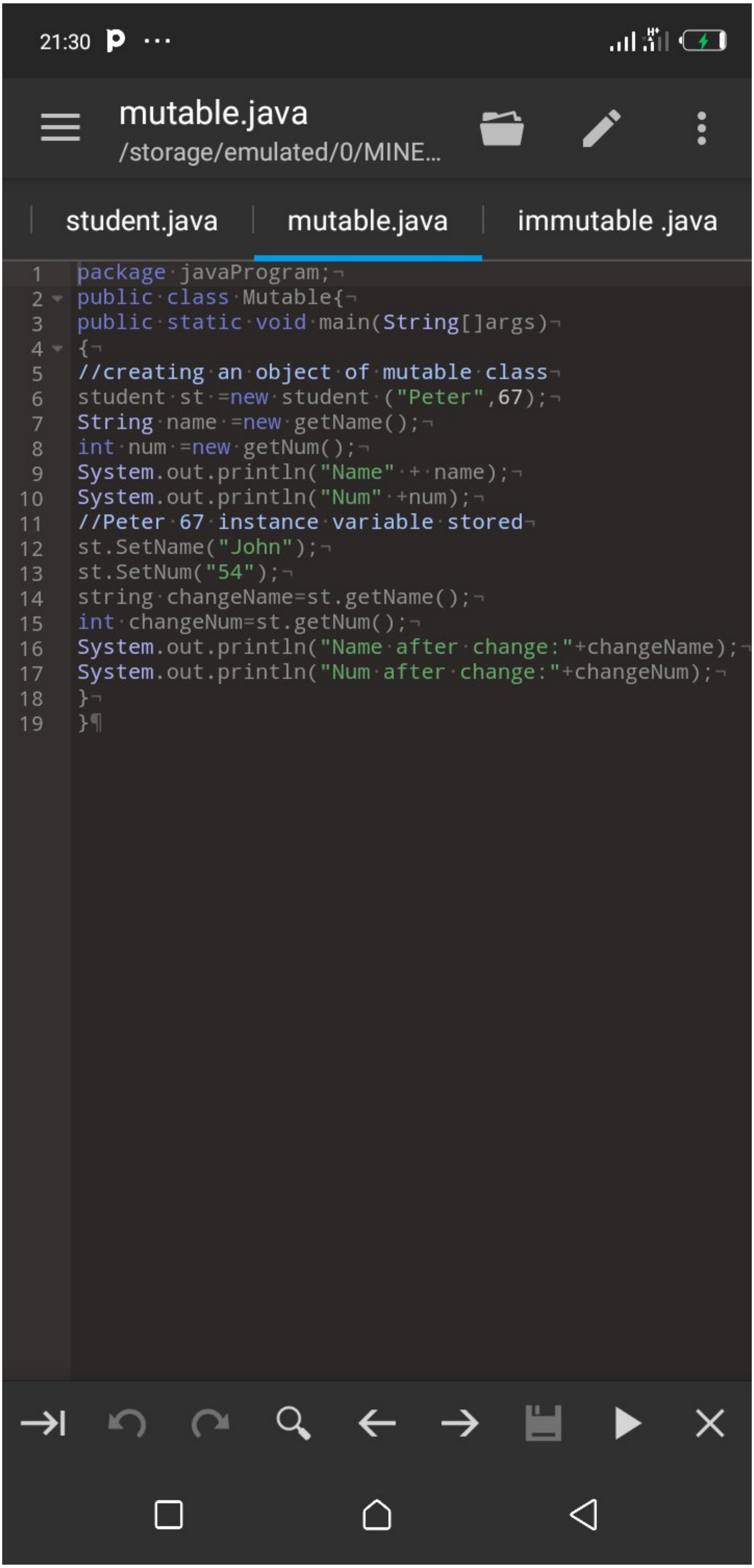
```
class pattern{
//no parameters
public void display(){
for(inr x=0;x<10;x++)
{
System.out.println("symbol");
}
}
}
class main{
public static void main(String[]args){
pattern dotted=new pattern();
//calling the method with no argument
dotted.display();
System.out.println("\n");
dotted.display("#");.
}
}
```


21:30
stringbuffer.java
/storage/emulated/0/MINE...
stringbuffer.java
student.java
mutable.java

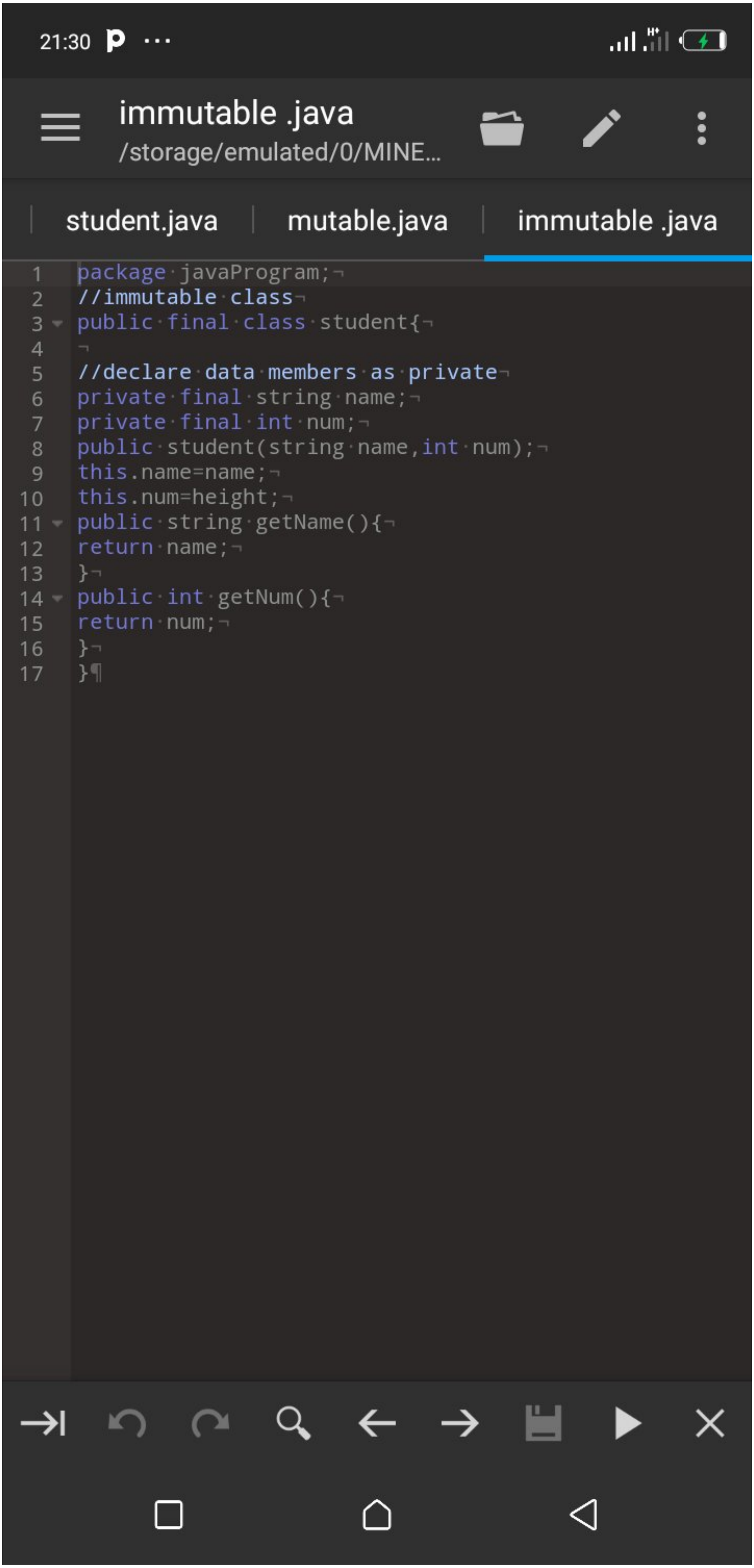
```
class String_BufferExample{
public static void main(Sting[]args){
String_Buffer sb=new String_Buffer("I love java");
sb.append("programming");
//original string is changed
System.out.println(sb);
//output I love java programming
}
}
```


21:30
student.java
/storage/emulated/0/MINE...
student.java
mutable.java
immutable .java

```java
package java program;
public class student
{
//private members
private String name;
private int num;
public student(String name,int height)
{
this.name=name;
this.num=height;
}
//declare get and set methods for each private variable
public String getName(){
return name;
}
public int get num(){
return num;
}
public void setName(String name){
this.name=name;
}
public void setNum(int num){
this.num=num;
}
}
```


21:30
mutable.java
/storage/emulated/0/MINE...
student.java
mutable.java
immutable .java

```java
package javaProgram;
public class Mutable{
public static void main(String[]args)
{
//creating an object of mutable class
student st =new student ("Peter",67);
String name =new getName();
int num =new getNum();
System.out.println("Name" + name);
System.out.println("Num" +num);
//Peter 67 instance variable stored
st.SetName("John");
st.SetNum("54");
string changeName=st.getName();
int changeNum=st.getNum();
System.out.println("Name after change:"+changeName);
System.out.println("Num after change:"+changeNum);
}
}
```


21:30
immutable .java
/storage/emulated/0/MINE...
student.java
mutable.java
immutable .java

```java
package javaProgram;
//immutable class
public final class student{

//declare data members as private
private final string name;
private final int num;
public student(string name,int num);
this.name=name;
this.num=height;
public string getName(){
return name;
}
public int getNum(){
return num;
}
}
```