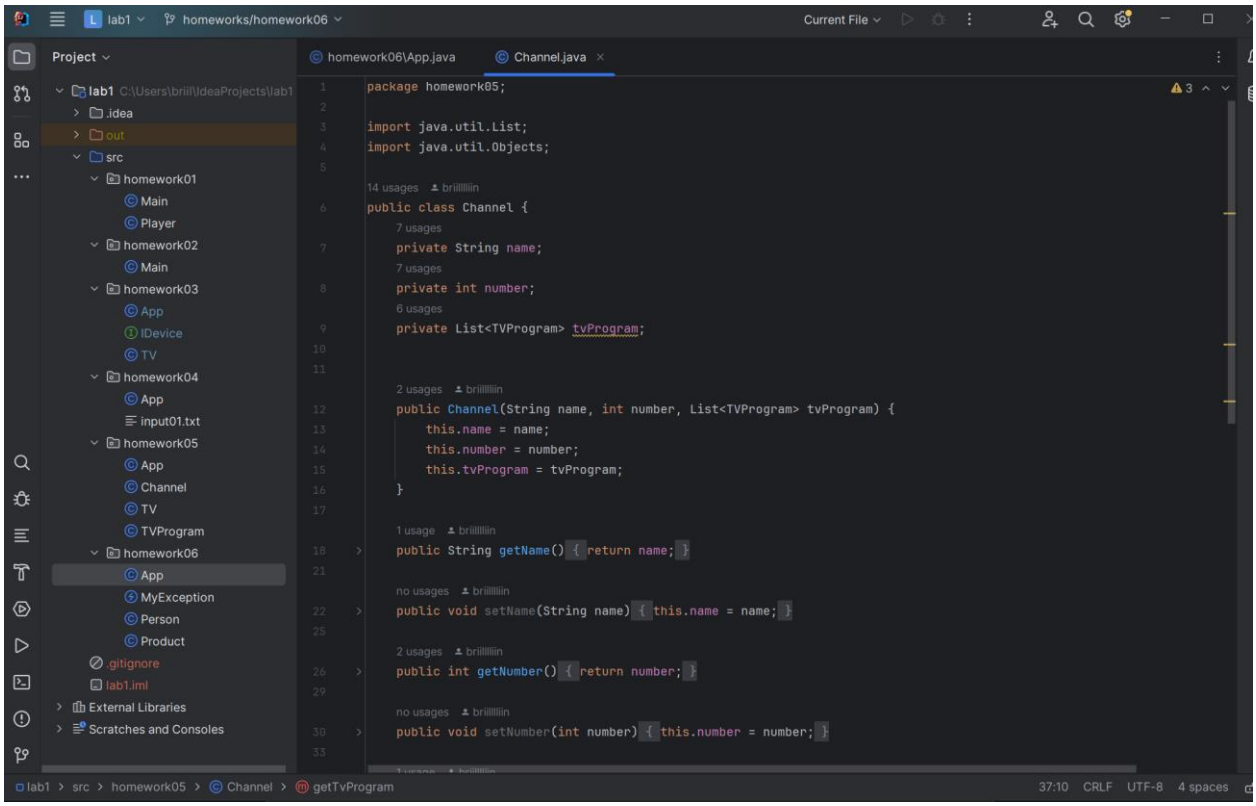
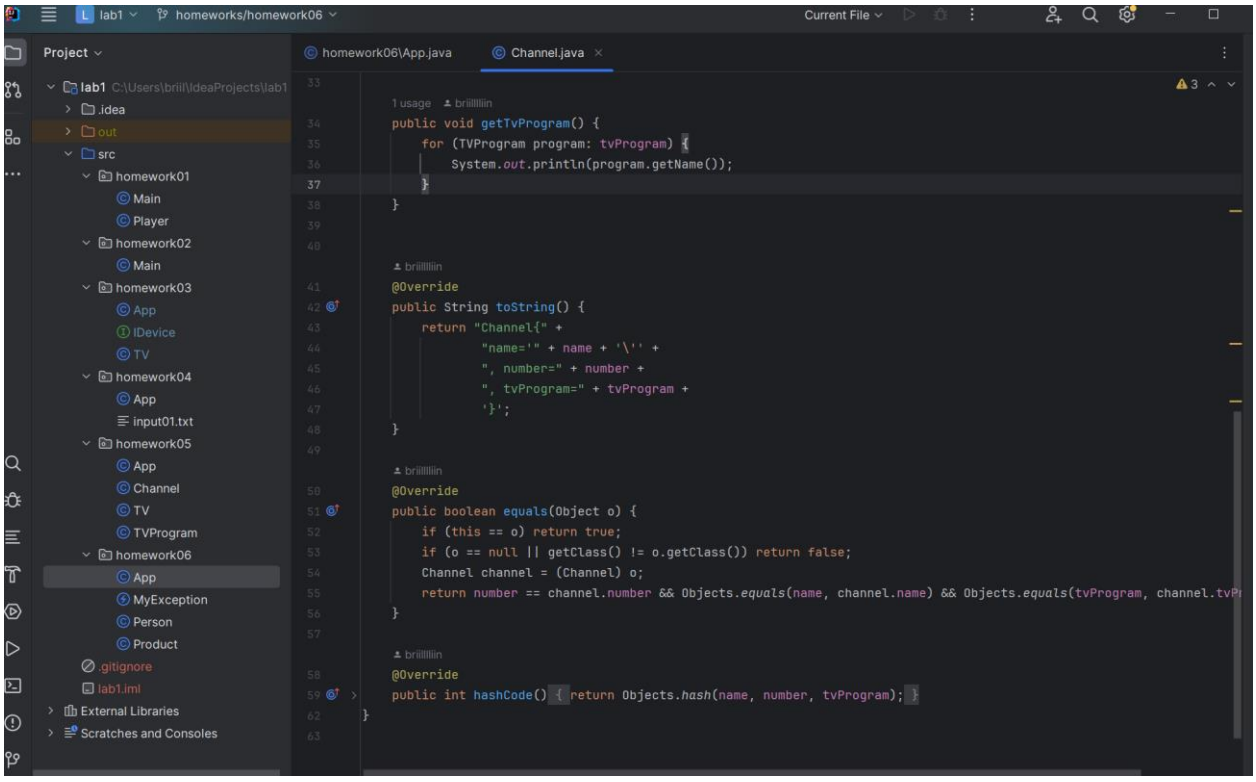
Класс, описывающий сущность «Канал»

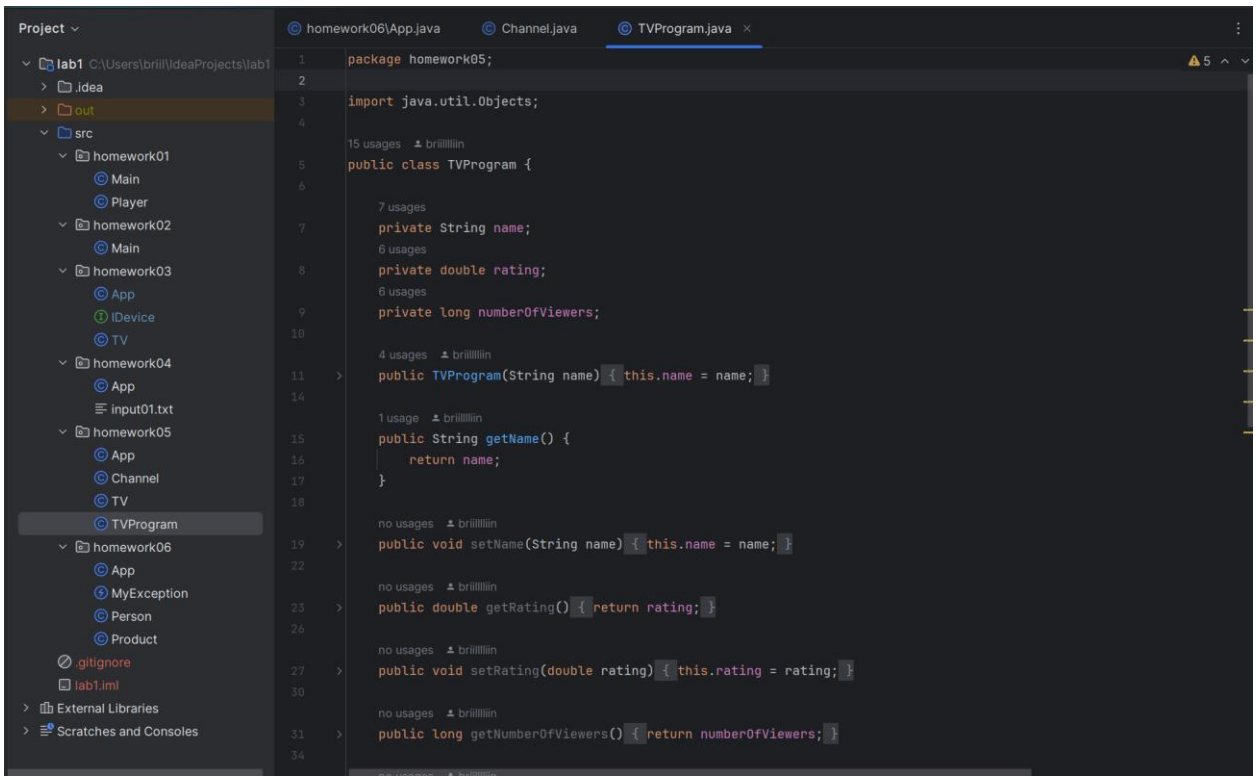


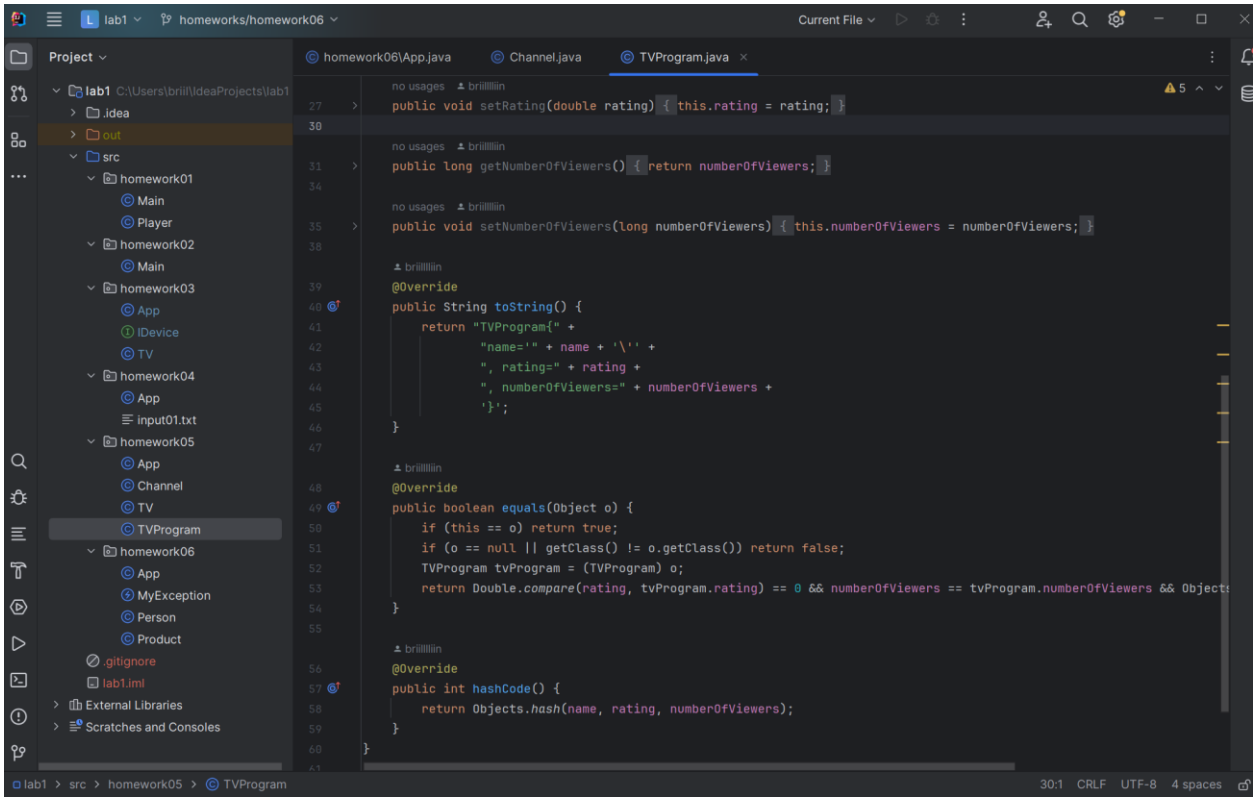
```java
package homework05;

import java.util.List;
import java.util.Objects;

public class Channel {
    private String name;
    private int number;
    private List<TVProgram> tvProgram;


    public Channel(String name, int number, List<TVProgram> tvProgram) {
        this.name = name;
        this.number = number;
        this.tvProgram = tvProgram;
    }

    public String getName() { return name; }

    public void setName(String name) { this.name = name; }

    public int getNumber() { return number; }

    public void setNumber(int number) { this.number = number; }
```



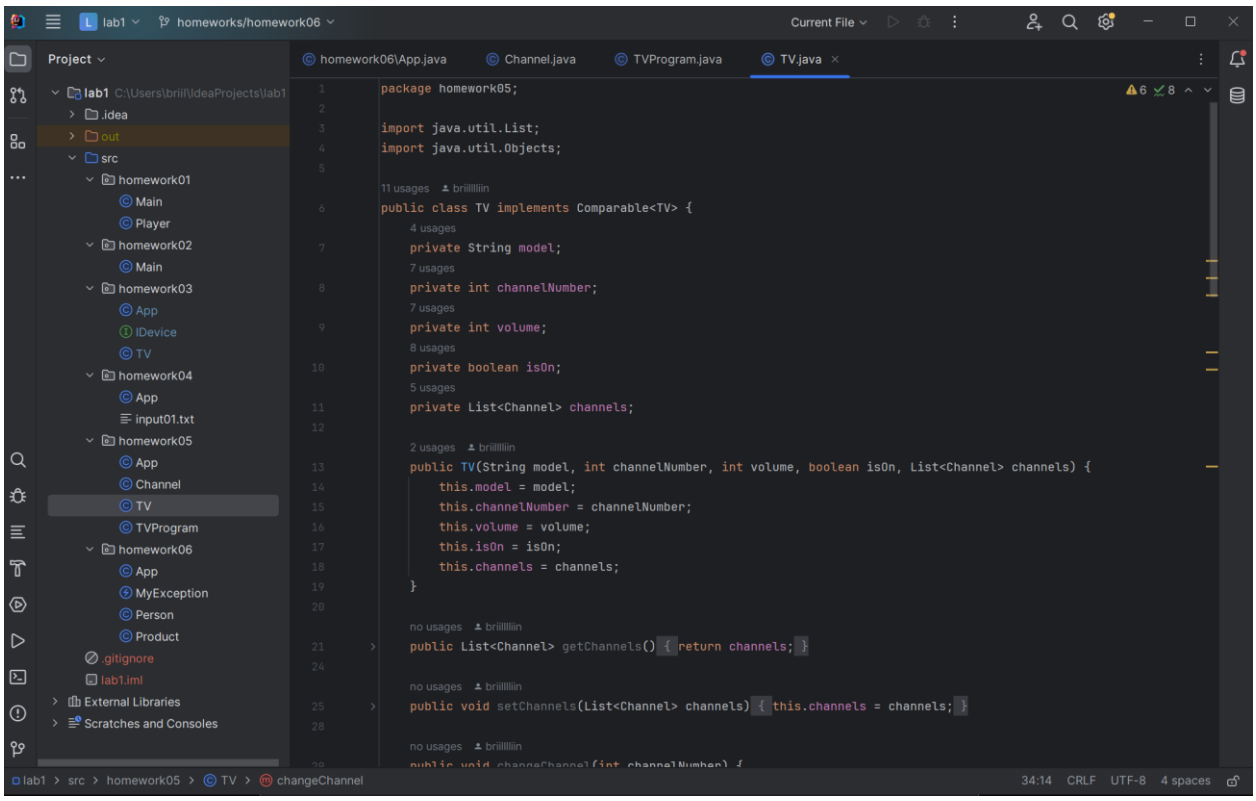
```java
    public void getTvProgram() {
        for (TVProgram program: tvProgram) {
            System.out.println(program.getName());
        }
    }


    @Override
    public String toString() {
        return "Channel{" +
                "name='" + name + '\'' +
                ", number=" + number +
                ", tvProgram=" + tvProgram +
                '}';
    }

    @Override
    public boolean equals(Object o) {
        if (this == o) return true;
        if (o == null || getClass() != o.getClass()) return false;
        Channel channel = (Channel) o;
        return number == channel.number && Objects.equals(name, channel.name) && Objects.equals(tvProgram, channel.tvP
    }

    @Override
    public int hashCode() { return Objects.hash(name, number, tvProgram); }
}
```

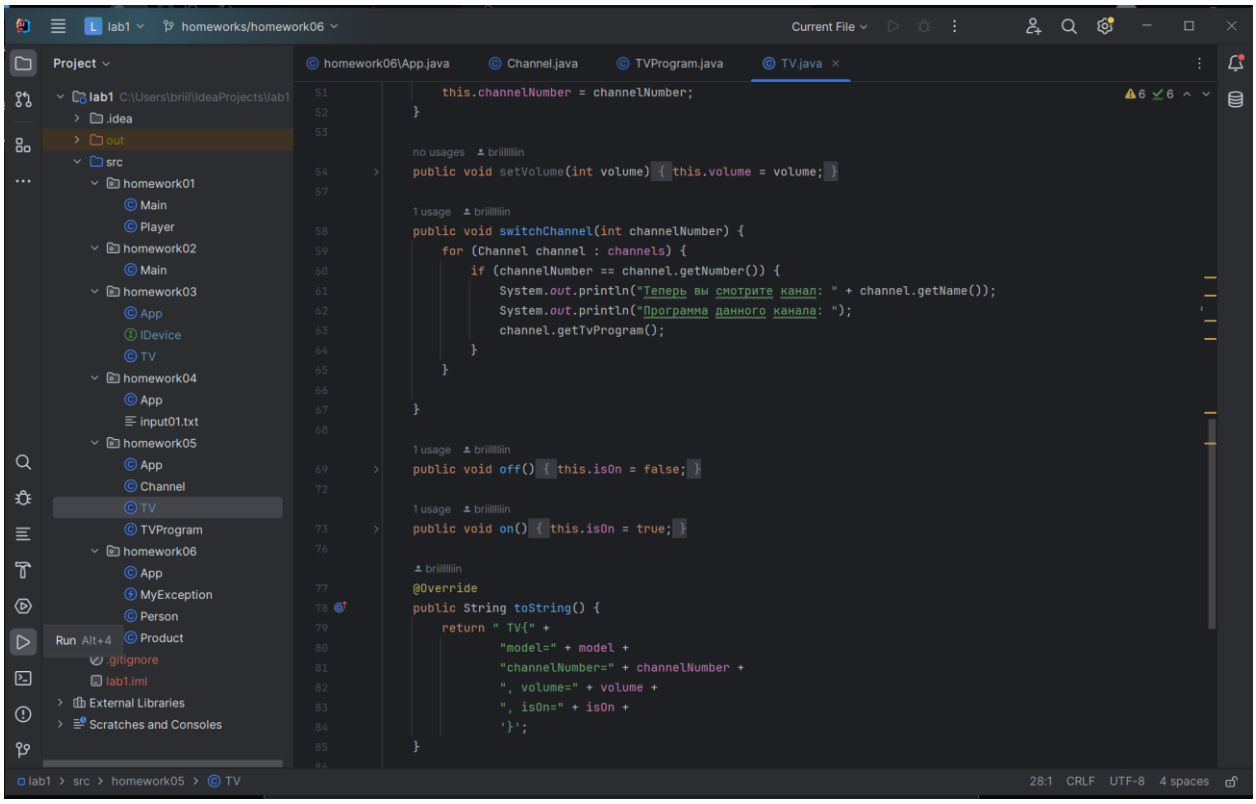
Класс, описывающий сущность «Программа»



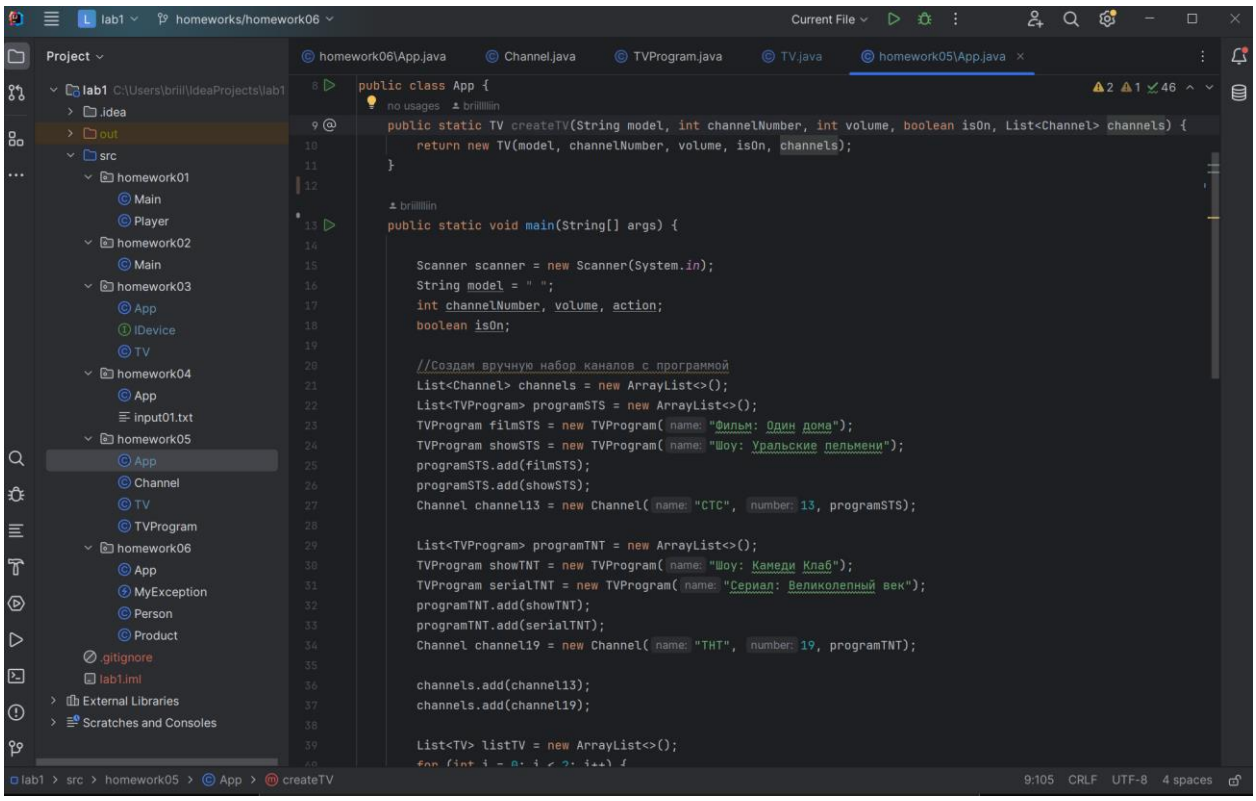


Класс, описывающий сущность «Телевизор»

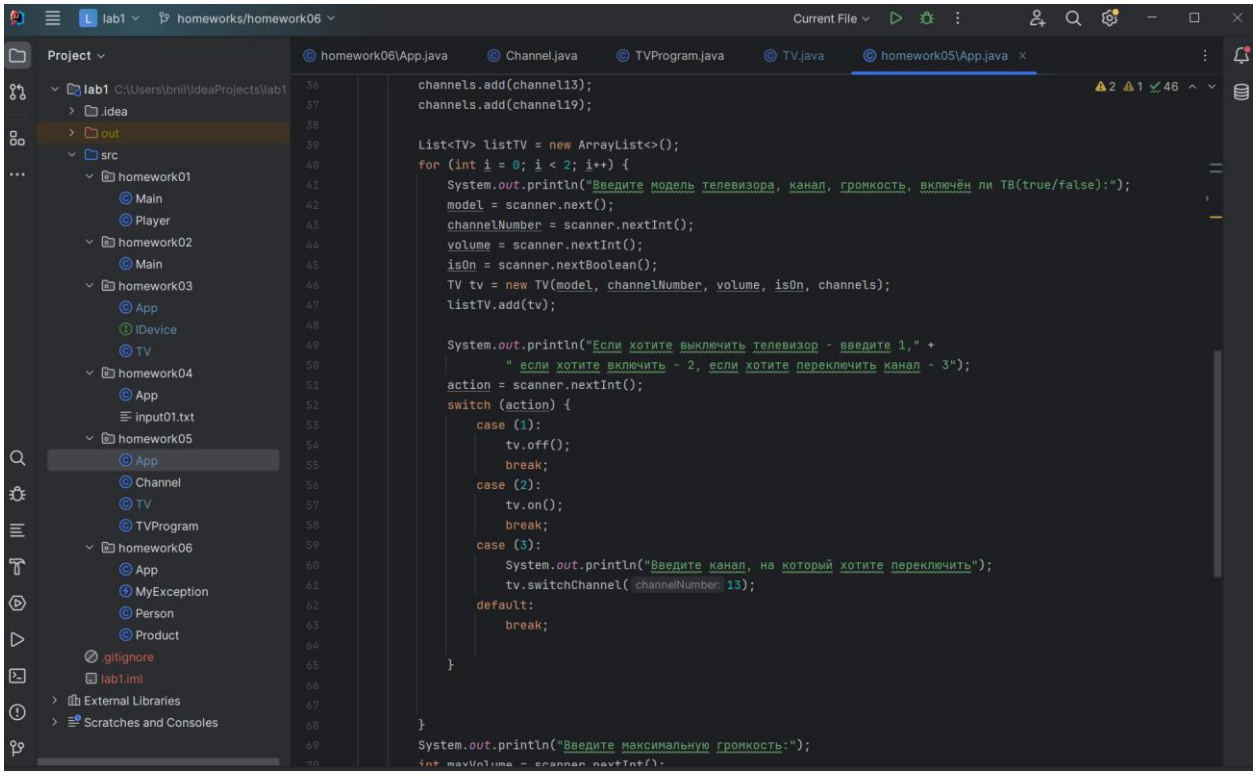

lab1
homeworks/homework06
Current File
Project
homework06\App.java
Channel.java
TVProgram.java
TV.java
lab1 C:\Users\brill\IdeaProjects\lab1
.idea
out
src
homework01
Main
Player
homework02
Main
homework03
App
IDevice
TV
homework04
App
input01.txt
homework05
App
Channel
TV
TVProgram
homework06
App
MyException
Person
Product
.gitignore
lab1.iml
External Libraries
Scratches and Consoles
package homework05;
import java.util.List;
import java.util.Objects;
11 usages brillllliin
public class TV implements Comparable<TV> {
4 usages
private String model;
7 usages
private int channelNumber;
7 usages
private int volume;
8 usages
private boolean isOn;
5 usages
private List<Channel> channels;
2 usages brillllliin
public TV(String model, int channelNumber, int volume, boolean isOn, List<Channel> channels) {
this.model = model;
this.channelNumber = channelNumber;
this.volume = volume;
this.isOn = isOn;
this.channels = channels;
}
no usages brillllliin
public List<Channel> getChannels() { return channels; }
no usages brillllliin
public void setChannels(List<Channel> channels) { this.channels = channels; }
no usages brillllliin
lab1 > src > homework05 > TV > changeChannel
34:14 CRLF UTF-8 4 spaces


lab1
homeworks/homework06
Current File
Project
homework06\App.java
Channel.java
TVProgram.java
TV.java
this.channelNumber = channelNumber;
}
no usages brillllliin
public void setVolume(int volume) { this.volume = volume; }
1 usage brillllliin
public void switchChannel(int channelNumber) {
for (Channel channel : channels) {
if (channelNumber == channel.getNumber()) {
System.out.println("Теперь вы смотрите канал: " + channel.getName());
System.out.println("Программа данного канала: ");
channel.getTvProgram();
}
}
}
1 usage brillllliin
public void off() { this.isOn = false; }
1 usage brillllliin
public void on() { this.isOn = true; }
brillllliin
@Override
public String toString() {
return " TV{" +
"model=" + model +
"channelNumber=" + channelNumber +
", volume=" + volume +
", isOn=" + isOn +
'}';
}
Run Alt+4
lab1 > src > homework05 > TV
28:1 CRLF UTF-8 4 spaces

Класс App



```
public class App {
    public static TV createTV(String model, int channelNumber, int volume, boolean isOn, List<Channel> channels) {
        return new TV(model, channelNumber, volume, isOn, channels);
    }

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);
        String model = " ";
        int channelNumber, volume, action;
        boolean isOn;

        //Создам вручную набор каналов с программой
        List<Channel> channels = new ArrayList<>();
        List<TVProgram> programSTS = new ArrayList<>();
        TVProgram filmSTS = new TVProgram( name: "Фильм: Один дома");
        TVProgram showSTS = new TVProgram( name: "Шоу: Уральские пельмени");
        programSTS.add(filmSTS);
        programSTS.add(showSTS);
        Channel channel13 = new Channel( name: "СТС",  number: 13, programSTS);

        List<TVProgram> programTNT = new ArrayList<>();
        TVProgram showTNT = new TVProgram( name: "Шоу: Камеди Клаб");
        TVProgram serialTNT = new TVProgram( name: "Сериал: Великолепный век");
        programTNT.add(showTNT);
        programTNT.add(serialTNT);
        Channel channel19 = new Channel( name: "ТНТ",  number: 19, programTNT);

        channels.add(channel13);
        channels.add(channel19);

        List<TV> listTV = new ArrayList<>();
```



```
        channels.add(channel13);
        channels.add(channel19);

        List<TV> listTV = new ArrayList<>();
        for (int i = 0; i < 2; i++) {
            System.out.println("Введите модель телевизора, канал, громкость, включён ли ТВ(true/false):");
            model = scanner.next();
            channelNumber = scanner.nextInt();
            volume = scanner.nextInt();
            isOn = scanner.nextBoolean();
            TV tv = new TV(model, channelNumber, volume, isOn, channels);
            listTV.add(tv);

            System.out.println("Если хотите выключить телевизор - введите 1," +
                    " если хотите включить - 2, если хотите переключить канал - 3");
            action = scanner.nextInt();
            switch (action) {
                case (1):
                    tv.off();
                    break;
                case (2):
                    tv.on();
                    break;
                case (3):
                    System.out.println("Введите канал, на который хотите переключить");
                    tv.switchChannel( channelNumber: 13);
                default:
                    break;

            }


        }
        System.out.println("Введите максимальную громкость:");
```