

Практическая №1

1.

```
1 fun main() {
2     // 1. Вывод информации о типах данных
3     println("Типы данных в Kotlin:")
4     println("1. Целочисленные: Int (32-битные целые числа), Long (64-битные целые числа)")
5     println("2. Числа с плавающей точкой: Float (32-битные числа), Double (64-битные числа)")
6     println("3. Строки: String (последовательности символов)")
7     println("4. Логические: Boolean (true или false)")
8     println("5. Символы: Char (один символ)")
9 }
10
```

Run MainKt

C:\Users\Student\.jdk\openjdk-23.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\lib\idea_rt.jar=50446:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\bin" -Didea.config.path=C:\Users\Student\.Idea\config -Didea.system.path=C:\Users\Student\.Idea\system -Didea.platform.prefix=JDK -Didea.version=2024.2.1 -Didea.vendor.id=JetBrains -Didea.platform.prefix=JDK -Didea.vendor.id=JetBrains

Типы данных в Kotlin:
1. Целочисленные: Int (32-битные целые числа), Long (64-битные целые числа)
2. Числа с плавающей точкой: Float (32-битные числа), Double (64-битные числа)
3. Строки: String (последовательности символов)
4. Логические: Boolean (true или false)
5. Символы: Char (один символ)

Process finished with exit code 0

2.

```
1 fun main() {
2     // 2. Вывод числа с точностью до сотых
3     val number1: Double = 25.78754
4     println("Число с точностью до сотых: %.2f".format(number1))
5 }
6
```

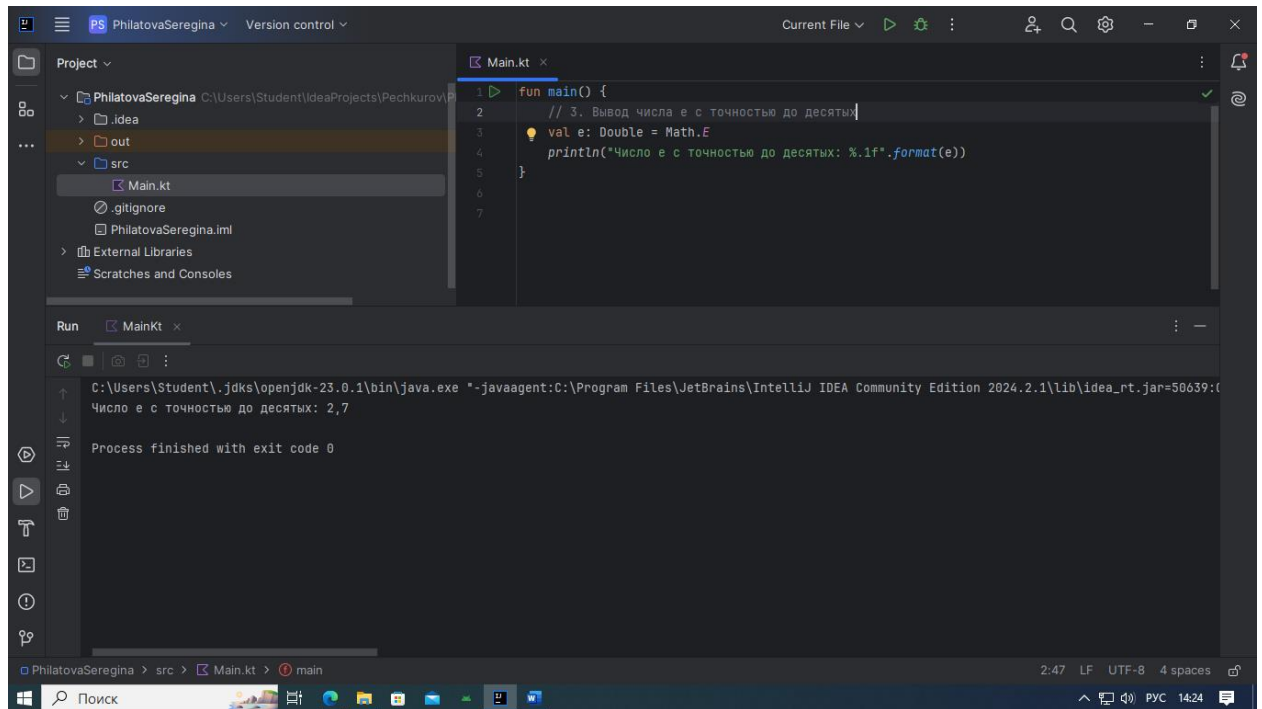
Run MainKt

C:\Users\Student\.jdk\openjdk-23.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\lib\idea_rt.jar=50496:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\bin" -Didea.config.path=C:\Users\Student\.Idea\config -Didea.system.path=C:\Users\Student\.Idea\system -Didea.platform.prefix=JDK -Didea.version=2024.2.1 -Didea.vendor.id=JetBrains -Didea.platform.prefix=JDK -Didea.vendor.id=JetBrains

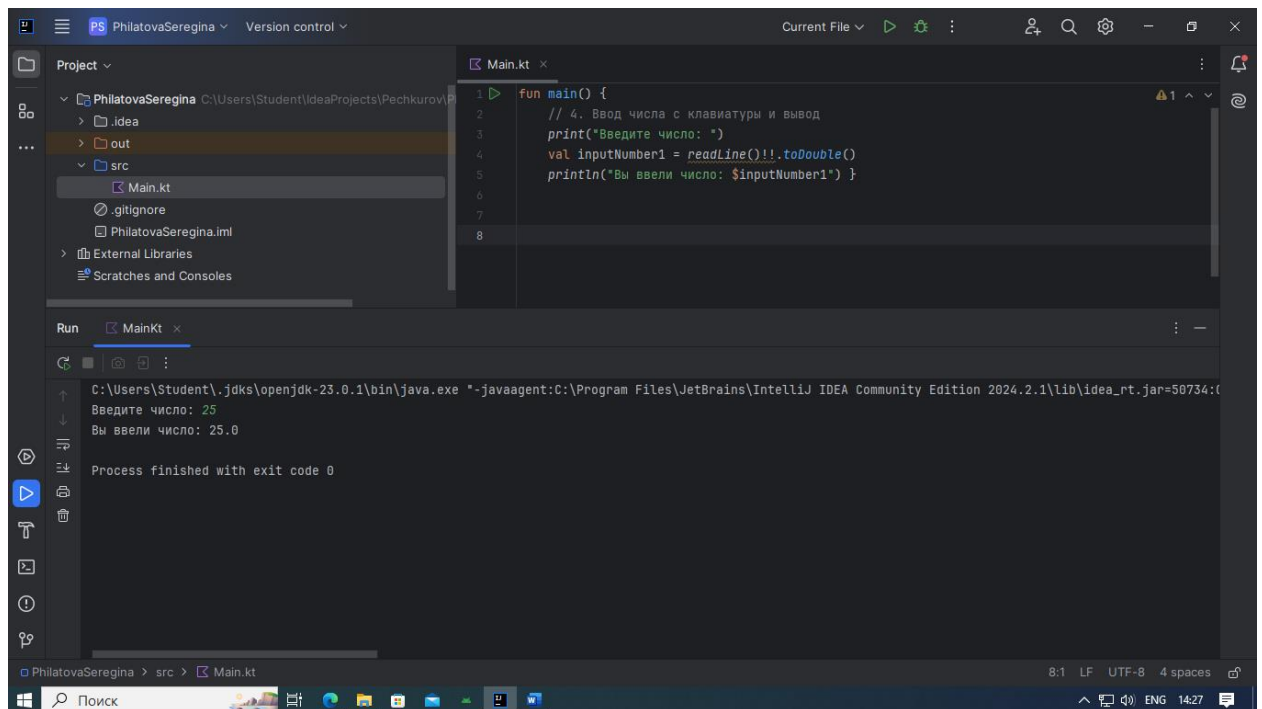
Число с точностью до сотых: 25,79

Process finished with exit code 0

3.



4.



The screenshot displays an IDE interface with a dark theme. The top toolbar includes icons for file operations, search, and window management. The 'Project' sidebar on the left shows the project structure for 'PhilatovaSeregina', with the 'src' directory and 'Main.kt' file selected. The 'Main.kt' editor window shows the following Kotlin code:

```
1 fun main() {  
2     // 5. Ввод числа с клавиатуры и вывод с сообщением  
3     print("Введите число: ")  
4     val inputNumber2 = readLine()!!.toDouble()  
5     println("$inputNumber2 - вот какое число Вы ввели")  
6  
7  
8 }
```

The 'Run' tab at the bottom shows the execution output for 'MainKt'. The command executed is 'C:\Users\Student\jdk\openjdk-23.0.1\bin\java.exe -javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\lib\idea_rt.jar=50760:C:\Users\Student\jdk\openjdk-23.0.1\bin\java.exe'. The output shows the program running and printing '10.0 - вот какое число Вы ввели' after the user input '10'. The process finished with exit code 0.

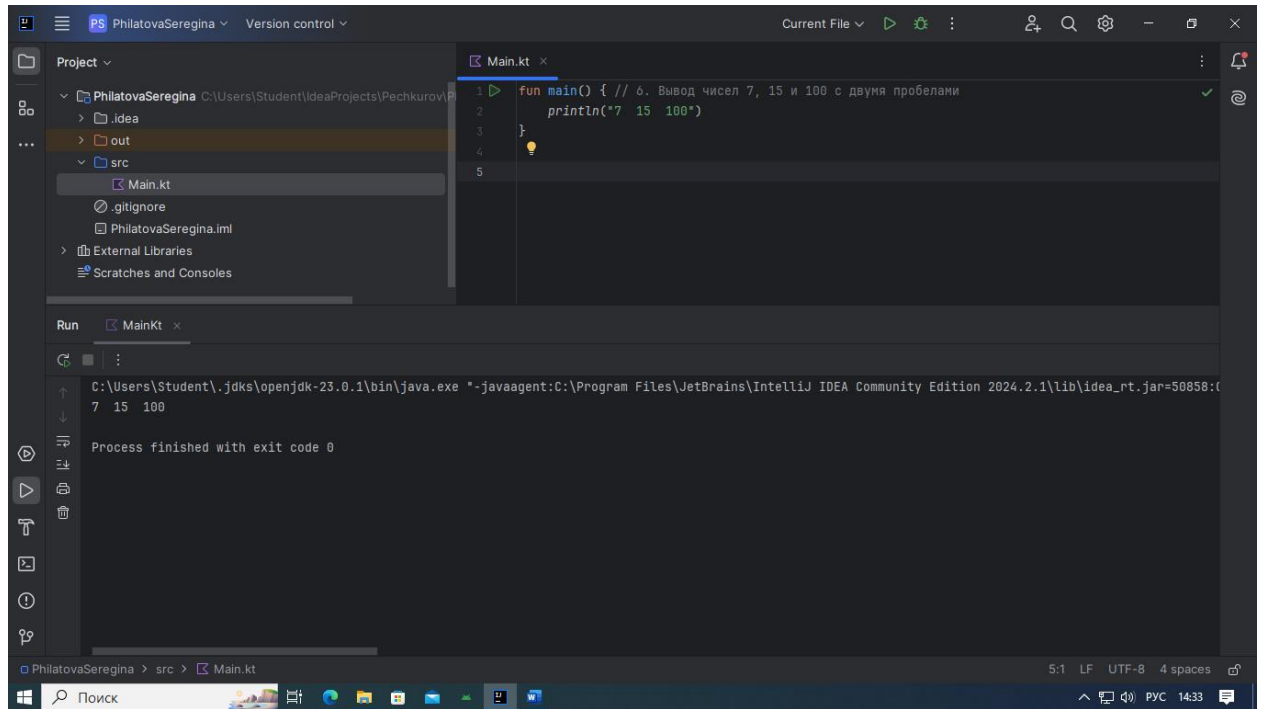
The bottom status bar indicates the current file is 'PhilatovaSeregina > src > Main.kt', the cursor is at line 8, column 1, and the encoding is UTF-8 with 4 spaces.

The screenshot displays an IDE interface with a dark theme. The top toolbar includes icons for file operations, running, and debugging. The 'Project' view on the left shows the project structure: 'PhilatovaSeregina' (C:\Users\Student\IdeaProjects\Pechkurov\PhilatovaSeregina) with subfolders '.idea', 'out', and 'src'. The 'src' folder contains 'Main.kt'. The 'Main.kt' file is open in the editor, showing the following Kotlin code:

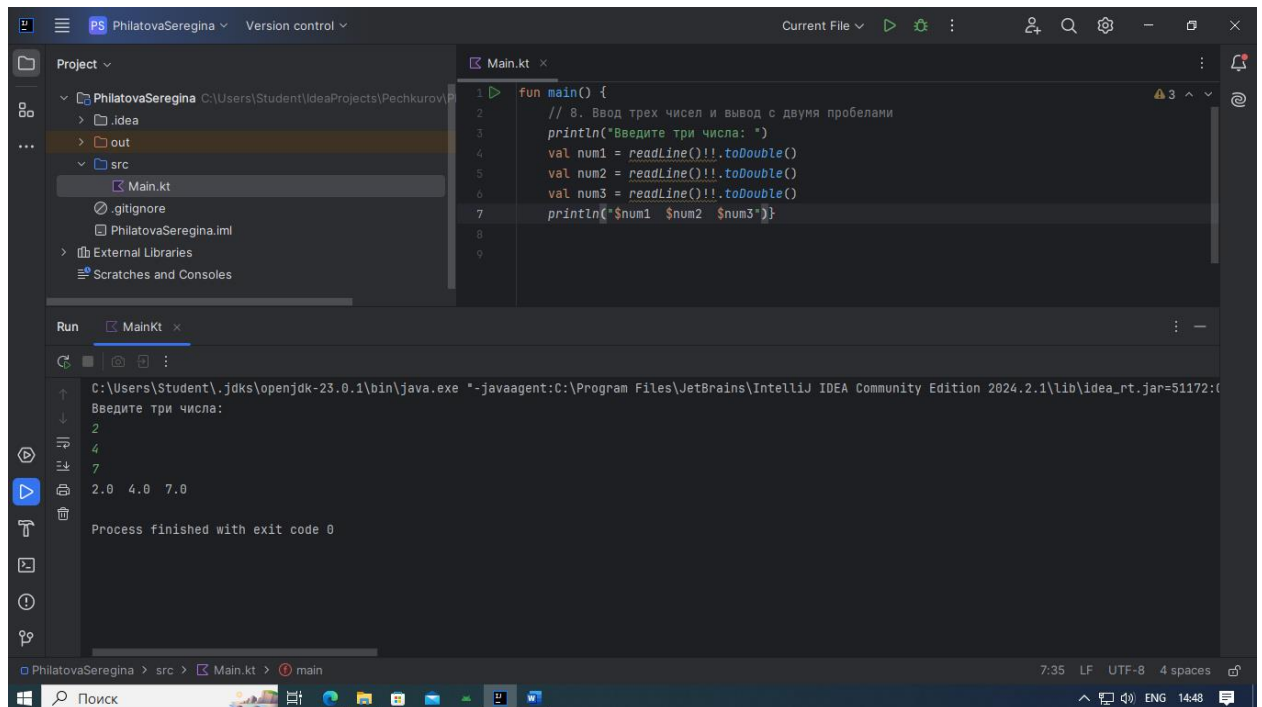
```
1 fun main() { // 6. Вывод чисел 13 и 49 с одним пробелом
2     println("1 13 49")
3 }
4
5
```

The 'Run' view at the bottom shows the execution command: `C:\Users\Student\jdk\openjdk-23.0.1\bin\java.exe -javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\lib\idea_rt.jar=50790:C:\Users\Student\jdk\openjdk-23.0.1\bin\java.exe`. The output is `1 13 49`, and the process finished with exit code 0. The status bar at the bottom indicates the file path: 'PhilatovaSeregina > src > Main.kt > main', the time '1:33', and the encoding 'UTF-8' with '4 spaces'.

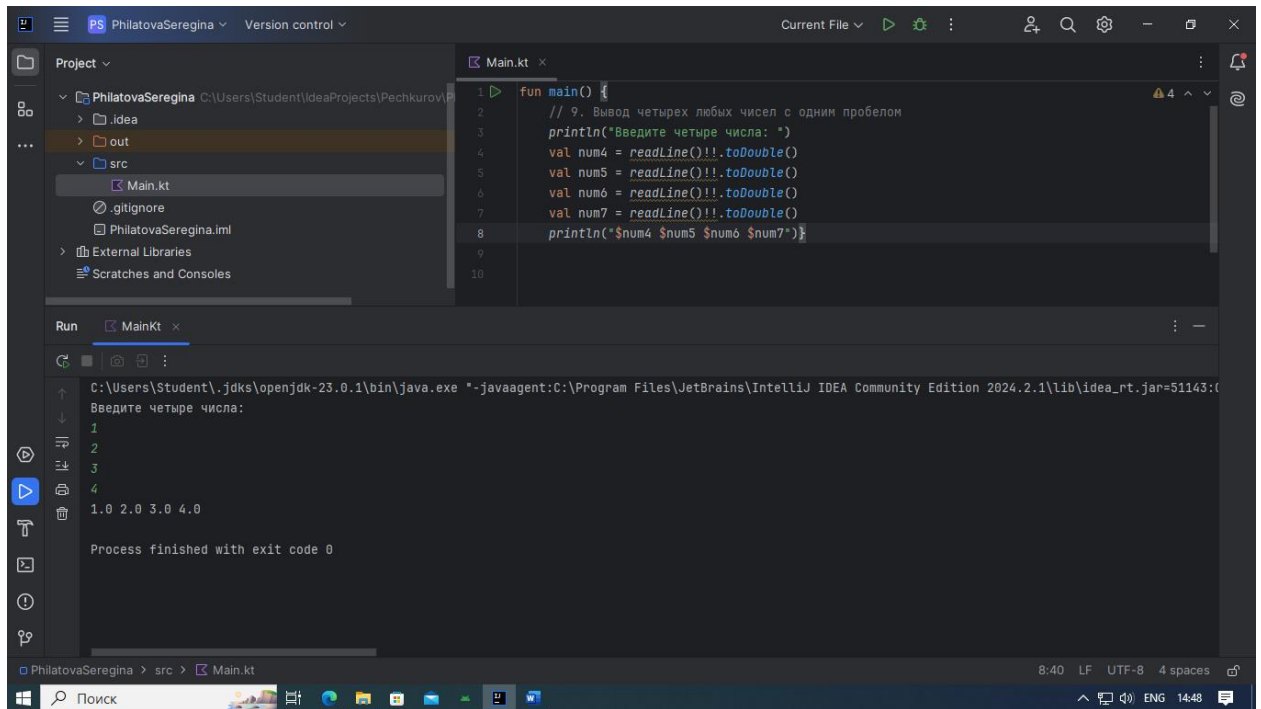
7.



8.



9.

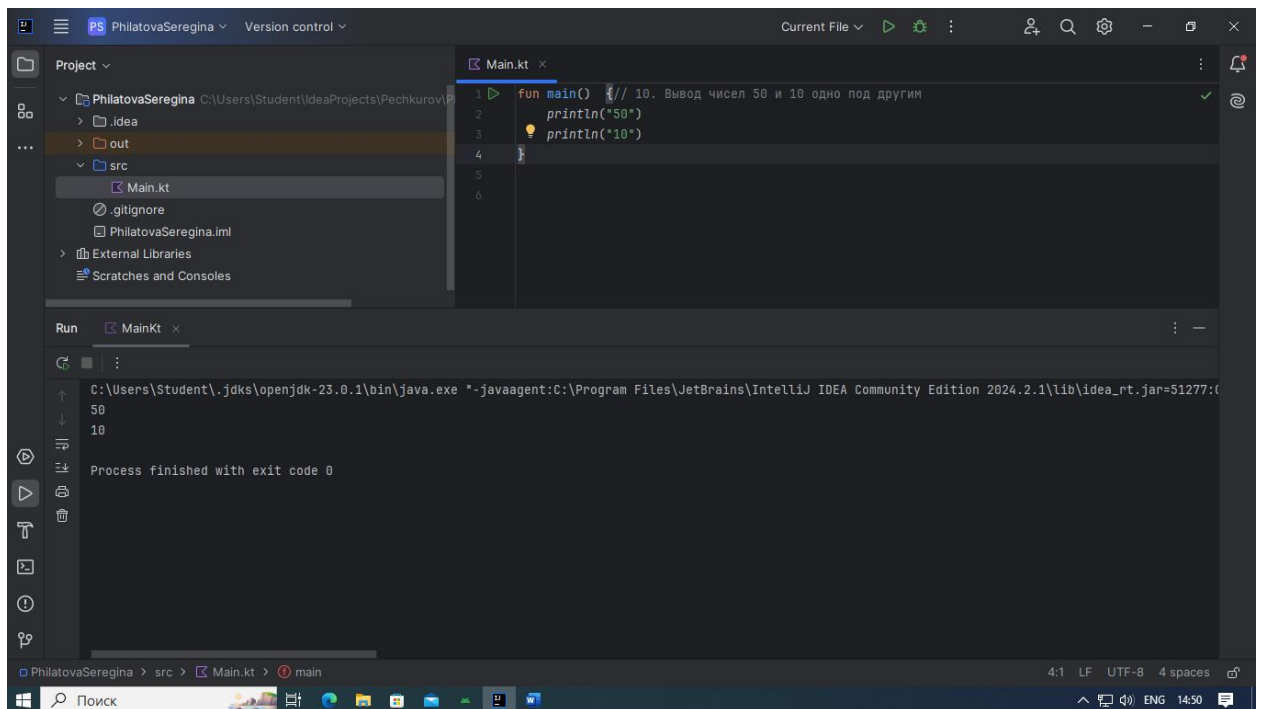


The screenshot shows the IntelliJ IDEA interface with a project named 'PhilatovaSeregina'. The 'Project' view on the left shows the file structure: 'src' > 'Main.kt'. The 'Main.kt' file is open in the editor, showing the following code:

```
1 fun main() {  
2     // 9. Вывод четырех любых чисел с одним пробелом  
3     println("Введите четыре числа: ")  
4     val num4 = readLine()!!.toDouble()  
5     val num5 = readLine()!!.toDouble()  
6     val num6 = readLine()!!.toDouble()  
7     val num7 = readLine()!!.toDouble()  
8     println("$num4 $num5 $num6 $num7")  
9 }  
10
```

The 'Run' view at the bottom shows the execution of the program. The command line is: `C:\Users\Student\jdk\openjdk-23.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\lib\idea_rt.jar=51143:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\bin" C:\Users\Student\IdeaProjects\PhilatovaSeregina\src\Main.kt`. The output is: `Введите четыре числа:
1
2
3
4
1.0 2.0 3.0 4.0`. The process finished with exit code 0.

10.

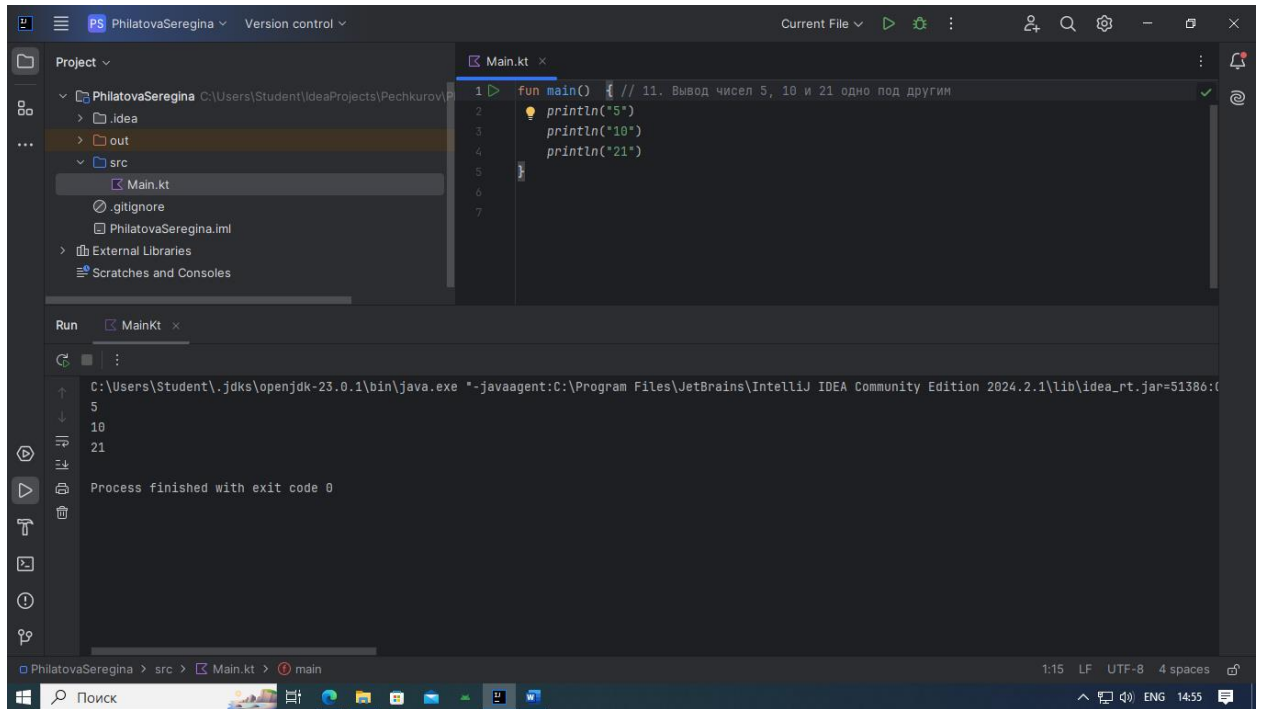


The screenshot shows the IntelliJ IDEA interface with the same project 'PhilatovaSeregina'. The 'Project' view on the left shows the file structure: 'src' > 'Main.kt'. The 'Main.kt' file is open in the editor, showing the following code:

```
1 fun main() { // 10. Вывод чисел 50 и 10 одно под другим  
2     println("50")  
3     println("10")  
4 }  
5  
6
```

The 'Run' view at the bottom shows the execution of the program. The command line is: `C:\Users\Student\jdk\openjdk-23.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\lib\idea_rt.jar=51277:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\bin" C:\Users\Student\IdeaProjects\PhilatovaSeregina\src\Main.kt`. The output is: `50
10`. The process finished with exit code 0.

11.



The screenshot shows the IntelliJ IDEA interface. The Project view on the left displays the project structure for 'PhilatovaSeregina', including 'src' and 'Main.kt'. The Main.kt file is open in the editor, showing a Kotlin function `main()` that prints three numbers vertically: 5, 10, and 21. The Run view at the bottom shows the output of the program, which matches the printed numbers. The status bar at the bottom indicates the file is in 'src' and 'Main.kt'.

```
1 fun main() { // 11. Вывод чисел 5, 10 и 21 одно под другим
2     println("5")
3     println("10")
4     println("21")
5 }
6
7
```

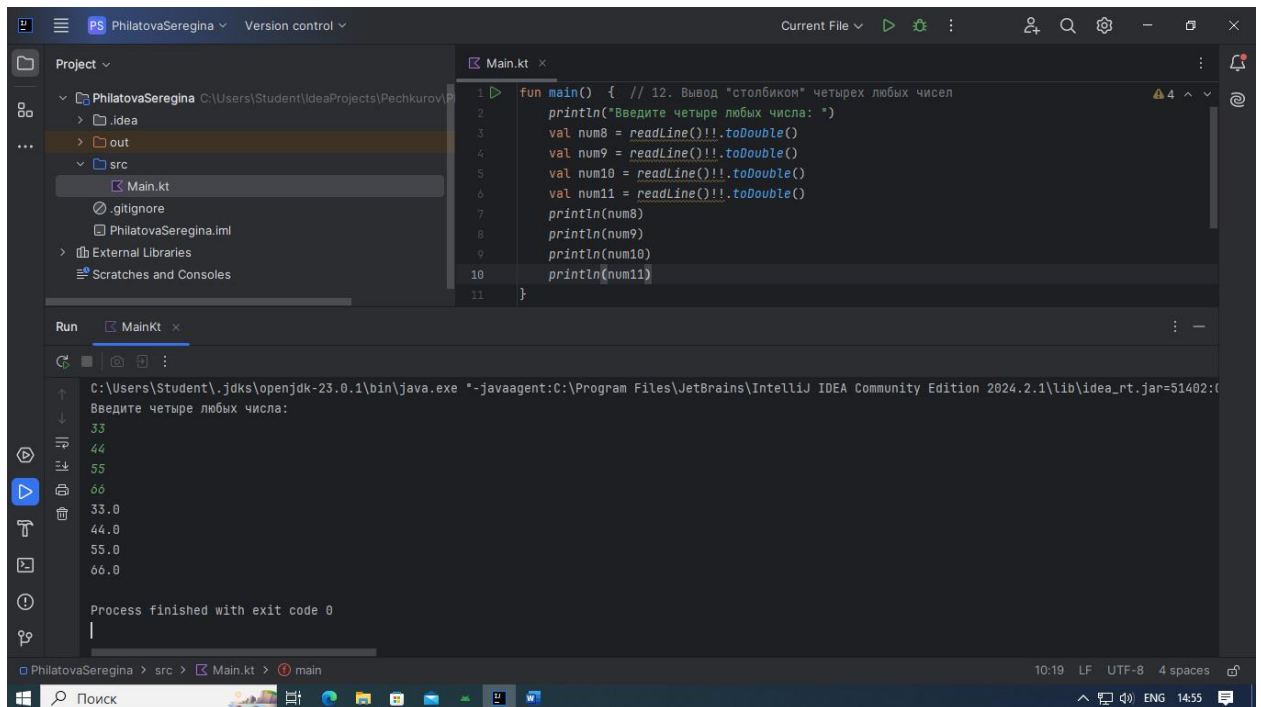
Run MainKt

C:\Users\Student\.jdk\openjdk-23.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\lib\idea_rt.jar=51386:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\bin" -Dfile.encoding=UTF-8

5
10
21

Process finished with exit code 0

12.



The screenshot shows the IntelliJ IDEA interface. The Project view on the left displays the project structure for 'PhilatovaSeregina', including 'src' and 'Main.kt'. The Main.kt file is open in the editor, showing a Kotlin function `main()` that reads four numbers from the user and prints them vertically. The Run view at the bottom shows the output of the program, which matches the input numbers: 33, 44, 55, and 66. The status bar at the bottom indicates the file is in 'src' and 'Main.kt'.

```
1 fun main() { // 12. Вывод "столбиком" четырех любых чисел
2     println("Введите четыре любых числа: ")
3     val num8 = readLine()!!.toDouble()
4     val num9 = readLine()!!.toDouble()
5     val num10 = readLine()!!.toDouble()
6     val num11 = readLine()!!.toDouble()
7     println(num8)
8     println(num9)
9     println(num10)
10    println(num11)
11 }

```

Run MainKt

C:\Users\Student\.jdk\openjdk-23.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\lib\idea_rt.jar=51402:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\bin" -Dfile.encoding=UTF-8

Введите четыре любых числа:
33
44
55
66
33.0
44.0
55.0
66.0

Process finished with exit code 0