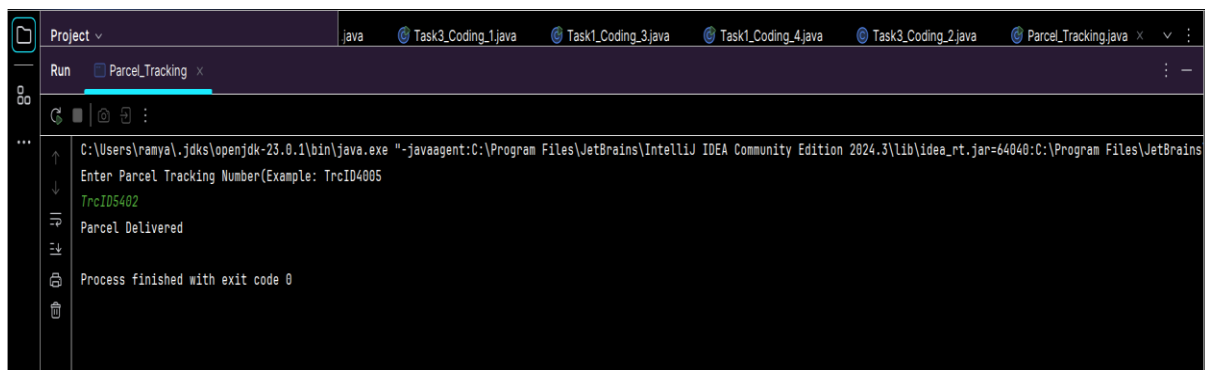


Assignment_DataStructures_Code_Output

1. Parcel Tracking: Create a program that allows users to input a parcel tracking number. Store the tracking number and Status in 2d String Array. Initialize the array with values. Then, simulate the tracking process by displaying messages like "Parcel in transit," "Parcel out for delivery," or "Parcel delivered" based on the tracking number's status.

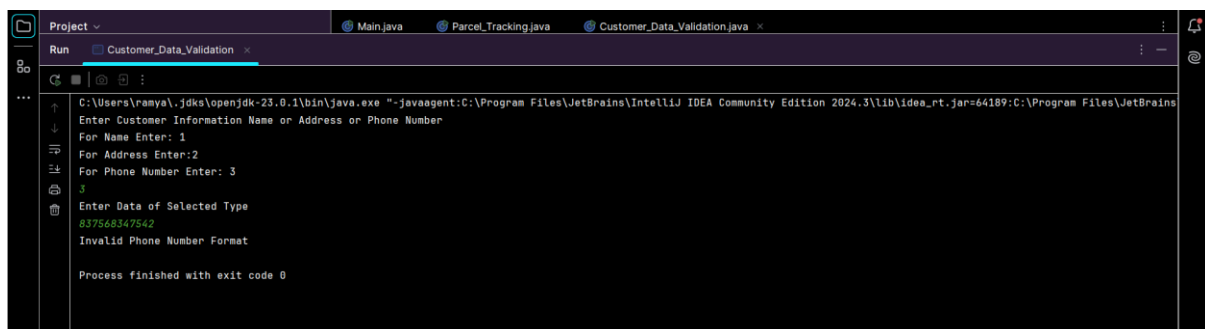
OUTPUT



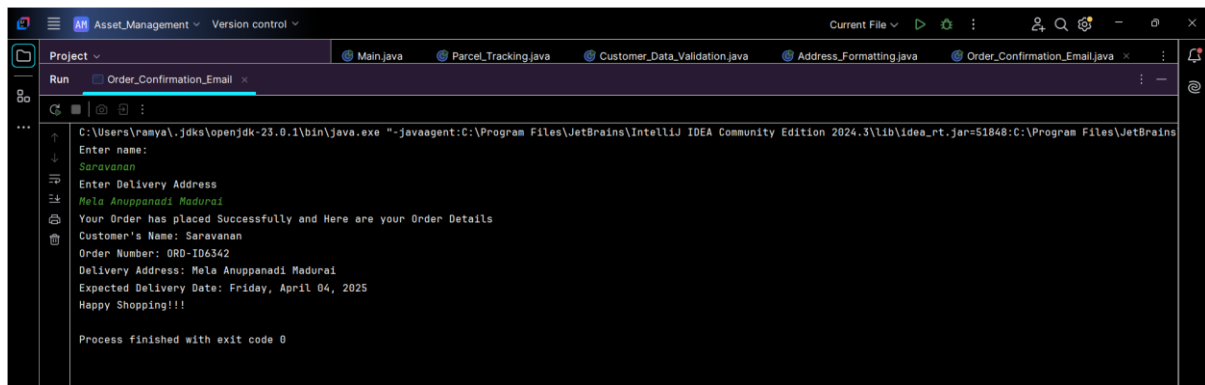
```
Project > java Task3_Coding_1.java Task1_Coding_3.java Task1_Coding_4.java Task3_Coding_2.java Parcel_Tracking.java x
Run Parcel_Tracking x
C:\Users\ramya\.jdk\openjdk-23.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\lib\idea_rt.jar=64040:C:\Program Files\JetBrains
Enter Parcel Tracking Number(Example: TrcID4005)
TrcID5402
Parcel Delivered
Process finished with exit code 0
```

2.Customer Data Validation: Write a function which takes 2 parameters, data-denotes the data and detail-denotes if it is name address or phone number. Validate customer information based on following criteria. Ensure that names contain only letters and are properly capitalized, addresses do not contain special characters, and phone numbers follow a specific format (e.g., ###-###-####).

OUTPUT



```
Project > Main.java Parcel_Tracking.java Customer_Data_Validation.java x
Run Customer_Data_Validation x
C:\Users\ramya\.jdk\openjdk-23.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\lib\idea_rt.jar=64189:C:\Program Files\JetBrains
Enter Customer Information Name or Address or Phone Number
For Name Enter: 1
For Address Enter: 2
For Phone Number Enter: 3
3
Enter Data of Selected Type
837568347542
Invalid Phone Number Format
Process finished with exit code 0
```

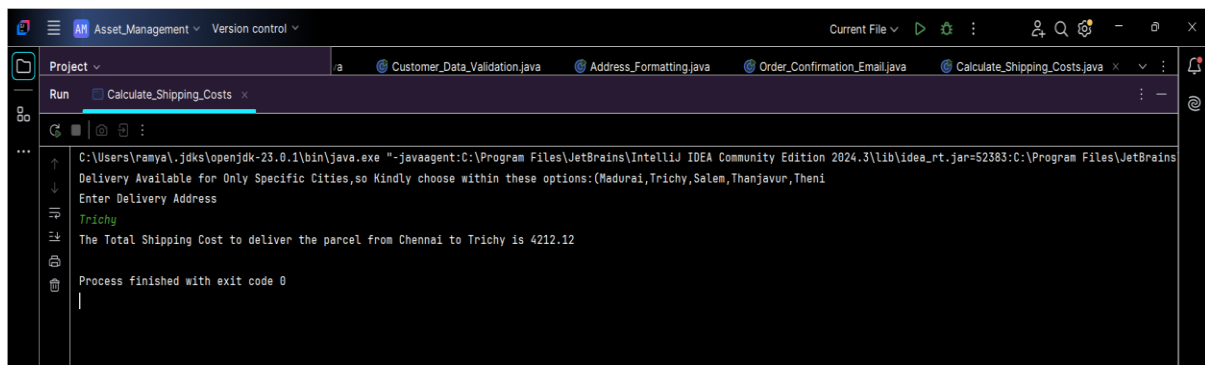



```
C:\Users\ramya\.jdk\openjdk-23.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\lib\idea_rt.jar=51848:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\bin" -Dfile.encoding=UTF-8
Enter name:
Saravanan
Enter Delivery Address:
Mela Anuppanadi Madurai
Your Order has placed Successfully and Here are your Order Details
Customer's Name: Saravanan
Order Number: ORD-ID6342
Delivery Address: Mela Anuppanadi Madurai
Expected Delivery Date: Friday, April 04, 2025
Happy Shopping!!!

Process finished with exit code 0
```

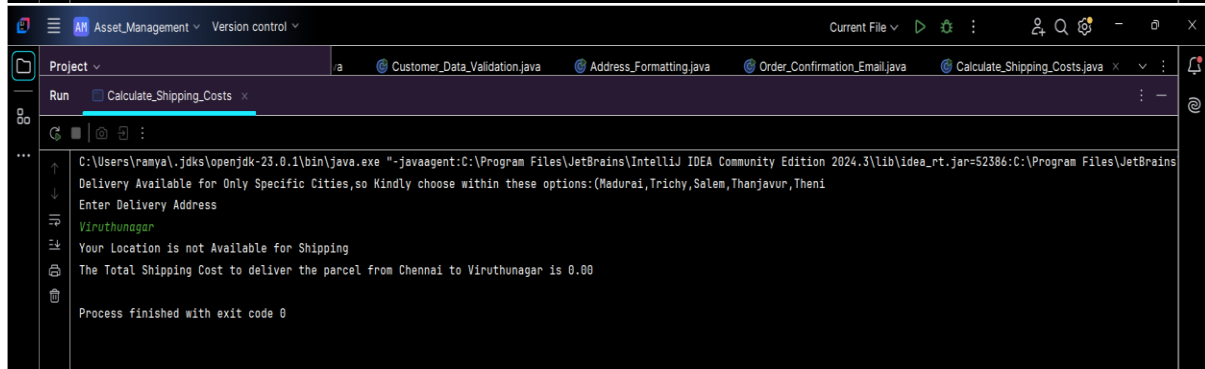
5.Calculate Shipping Costs: Develop a function that calculates the shipping cost based on the distance between two locations and the weight of the parcel. You can use string inputs for the source and destination addresses

OUTPUT



```
C:\Users\ramya\.jdk\openjdk-23.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\lib\idea_rt.jar=52383:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\bin" -Dfile.encoding=UTF-8
Delivery Available for Only Specific Cities,so Kindly choose within these options:(Madurai,Trichy,Salem,Thanjavur,Theni)
Enter Delivery Address:
Trichy
The Total Shipping Cost to deliver the parcel from Chennai to Trichy is 4212.12

Process finished with exit code 0
```

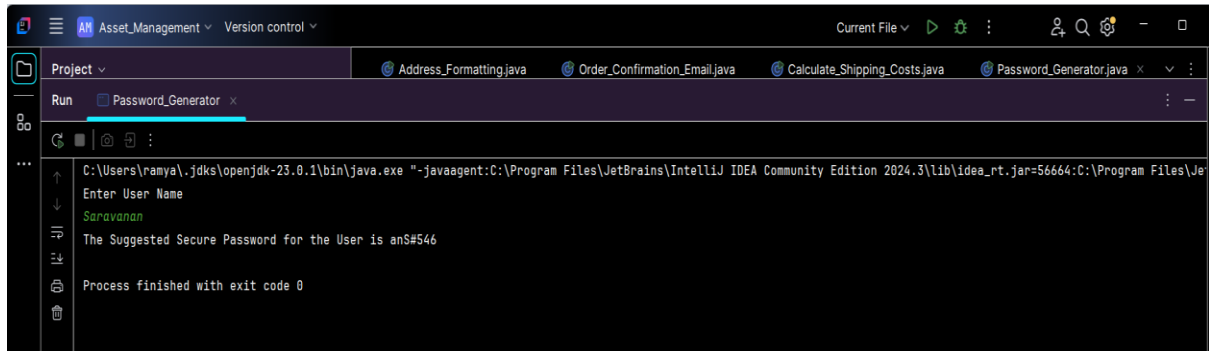


```
C:\Users\ramya\.jdk\openjdk-23.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\lib\idea_rt.jar=52386:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\bin" -Dfile.encoding=UTF-8
Delivery Available for Only Specific Cities,so Kindly choose within these options:(Madurai,Trichy,Salem,Thanjavur,Theni)
Enter Delivery Address:
Viruthunagar
Your Location is not Available for Shipping
The Total Shipping Cost to deliver the parcel from Chennai to Viruthunagar is 0.00

Process finished with exit code 0
```

6.Password Generator: Create a function that generates secure passwords for courier system accounts. Ensure the passwords contain a mix of uppercase letters, lowercase letters, numbers, and special characters.

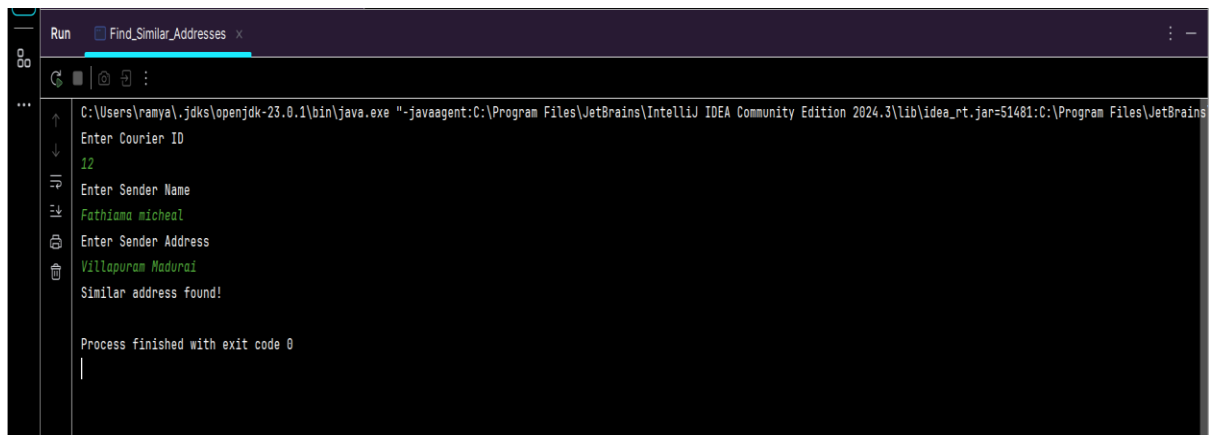
OUTPUT



```
C:\Users\ranya\.jdk\openjdk-23.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\lib\idea_rt.jar=56664:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\bin" -Didea.config.path=C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\conf -Didea.copyright.path=C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\copyright -Didea.home.path=C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\bin -Didea.platform.prefix=JDK -Didea.vendor.id=jetbrains -Djava.awt.headless=true -Djava.class.path=C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\bin\idea_rt.jar -jar C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\bin\idea_rt.jar
Enter User Name
Saravanan
The Suggested Secure Password for the User is anS#546
Process finished with exit code 0
```

7.Find Similar Addresses: Implement a function that finds similar addresses in the system. This can be useful for identifying duplicate customer entries or optimizing delivery routes.Use string functions to implement this.

OUTPUT



```
C:\Users\ranya\.jdk\openjdk-23.0.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\lib\idea_rt.jar=51481:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\bin" -Didea.config.path=C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\conf -Didea.copyright.path=C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\copyright -Didea.home.path=C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\bin -Didea.platform.prefix=JDK -Didea.vendor.id=jetbrains -Djava.awt.headless=true -Djava.class.path=C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\bin\idea_rt.jar -jar C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.3\bin\idea_rt.jar
Enter Courier ID
12
Enter Sender Name
Fathiana Micheal
Enter Sender Address
Villapuram Madurai
Similar address found!
Process finished with exit code 0
```