

Java 8 Features

Q1. A Name Finder:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Run: ANameFinder + - [ ] ... [ ] X

PS E:\Java_8_Features> & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\arash\AppData\Roaming\Code\User\workspaceStorage\5120b040ca55f4e59fc1d5d4867a86ea\redhat.java\jdt_ws\Java_8_Features_bd9c4d27\bin' 'ANameFinder'
Names starting with 'A':
Anita
Asha
Amma
PS E:\Java_8_Features>
```

Q2. Custom Filter Chain

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Run: CustomFilterChain + - [ ] ... [ ] X

PS E:\Java_8_Features> & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\arash\AppData\Roaming\Code\User\workspaceStorage\5120b040ca55f4e59fc1d5d4867a86ea\redhat.java\jdt_ws\Java_8_Features_bd9c4d27\bin' 'CustomFilterChain'
Names starting with 'A' and ending with 'a': [Anita, Amma]
PS E:\Java_8_Features>
```

Q3. Default Demo Power

```
DefaultPowerDemo.java x Problems Javadoc Declaration Console x
<terminated> DefaultPowerDemo (1) [Java Application] C:\Users\arash\AppData\Local\Temp\DefaultPowerDemo
Device is turning on...
Power status: ON
PS E:\Java_8_Features>
```

Q4. Even Number Collector

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Run: EvenNumberCollector + - [ ] ... [ ] X

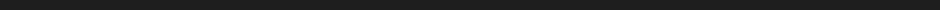
PS E:\Java_8_Features> & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\arash\AppData\Roaming\Code\User\workspaceStorage\5120b040ca55f4e59fc1d5d4867a86ea\redhat.java\jdt_ws\Java_8_Features_bd9c4d27\bin' 'EvenNumberCollector'
Even numbers: [4, 8, 10, 16]
PS E:\Java_8_Features>
```

Q5. Frequency Mapper

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Run: FrequencyMapper + - [ ] ... [ ] X

PS E:\Java_8_Features> & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\arash\AppData\Roaming\Code\User\workspaceStorage\5120b040ca55f4e59fc1d5d4867a86ea\redhat.java\jdt_ws\Java_8_Features_bd9c4d27\bin' 'FrequencyMapper'
Name frequencies: {Rashi=1, Dad=1, John=1, Abdul=1, Geeth=1, Amma=1}
PS E:\Java_8_Features>
```

Q6. Greetings Printer



The screenshot shows the Visual Studio Code interface with the 'TERMINAL' tab selected. The terminal window displays the following commands and output:

```
PS E:\Java_8_Features> & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\arash\AppData\Roaming\Code\User\workspacestorage\512b0040ca55f4e959fcd5d4867a86ea\redhat.java\jdk_ws\Java_8_Features_bd9c4d27\bin\' 'GreetingsPrinter'
Hello, Abdul!
PS E:\Java_8_Features>
```

Q7. Method Reference Sorter

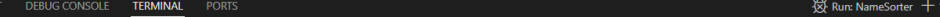
```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS Run: MethodReferenceSorter + - [ ] [ ] [ ] [ ] X
```

```
PS E:\Java_8_Features> & 'C:\Program Files\Java\jdk-21\bin\java.exe' ^-XX:+ShowCodeDetailsInExceptionMessages^ '-cp' 'C:\Users\arash\AppData\Roaming\Code\User\workspaceStorage\5120b040ca55f4e59fc1d5d4867a86ea\redhat.java\jdt_ws\Java_8_Features_bd9c4d27\bin' 'MethodReferenceSorter'
```

```
Abdul  
Akhil  
Balu  
Radha
```

```
PS E:\Java_8_Features>
```

Q8. Name Sorter



```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS E:\Java_8_Features> e;. cd 'e:\Java_8_Features'; & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\arash\AppData\Roaming\Code\User\workspaceStorage\5120b040ca55fa4e59fc1d5d4867a86ea\redhat.java\jdt_ws\Java_8_Features_bd9c4d27\bin' 'NameSorter'
Sorted names (collections.sort + lambda):
Abdul
Balu
Geetha
Karthik
Radha
PS E:\Java_8_Features>

```

Q9. Parallel Square Printer

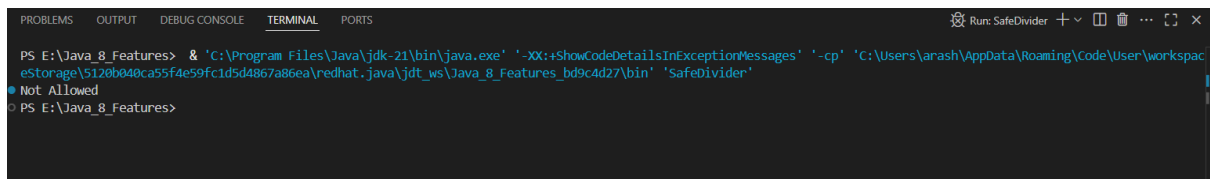


```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS E:\Java_8_Features> & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\arash\AppData\Roaming\Code\User\workspacestorage\5120b040ca55f4e59fc1d5d4867a86ea\redhat.java\jdt_ws\Java_8_Features_bd9c4d27\bin' 'ParallelSquarePrinter'
Square of 2 is 4
Square of 4 is 16
Square of 6 is 36
Square of 8 is 64
Square of 10 is 100
PS E:\Java_8_Features>
```

Q10. Pretty Joiner

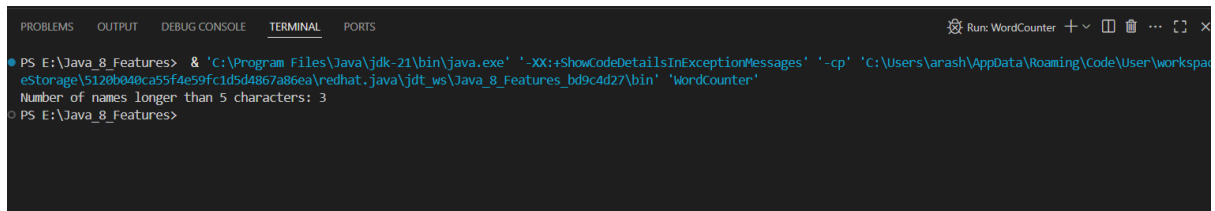
```
PS E:\Java_8_Features> & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-xx:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\arash\AppData\Roaming\Code\User\workspacestorage\5120b040ca55f4e59fcd5d4867a86ea\redhat.java\jdt_ws\Java_8_Features_bd9c4d27\bin\' 'PrettyJoiner'
Joined cities: Mumbai, Delhi, Chennai, Kolkata, Bengaluru
PS E:\Java_8_Features>
```

Q11. Safe Divider



The screenshot shows a VS Code terminal window with the title bar 'Run: SafeDivider'. The terminal has tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL (selected), and PORTS. The command prompt shows the execution of a Java program: `PS E:\Java_8_Features> & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\arash\AppData\Roaming\Code\User\workspaceStorage\5120b040ca55f4e59fc1d5d4867a86ea\redhat.java\jdt_ws\Java_8_Features_bd9c4d27\bin' 'SafeDivider'`. The output shows a blue error message: `Not Allowed`. The prompt then returns to `PS E:\Java_8_Features>`.

Q12. Word Counter



The screenshot shows a VS Code terminal window with the title bar 'Run: WordCounter'. The terminal has tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL (selected), and PORTS. The command prompt shows the execution of a Java program: `PS E:\Java_8_Features> & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\arash\AppData\Roaming\Code\User\workspaceStorage\5120b040ca55f4e59fc1d5d4867a86ea\redhat.java\jdt_ws\Java_8_Features_bd9c4d27\bin' 'WordCounter'`. The output shows the text: `Number of names longer than 5 characters: 3`. The prompt then returns to `PS E:\Java_8_Features>`.