

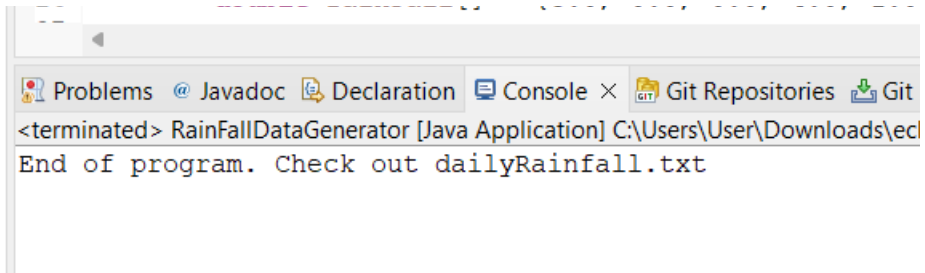
NAME: SIOW ZHE YI

MATRIC NUMBER: B032220024

EXERCISE 5

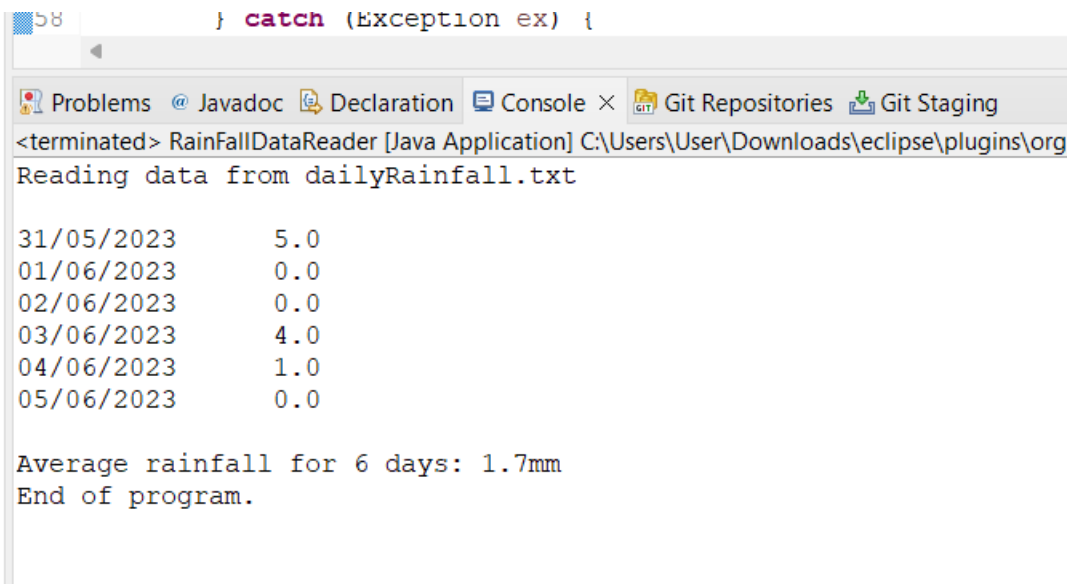
screen shot of output

RainFallDataGenerator.java



```
<terminated> RainFallDataGenerator [Java Application] C:\Users\User\Downloads\ec  
End of program. Check out dailyRainfall.txt
```

RainFallDataReader.java

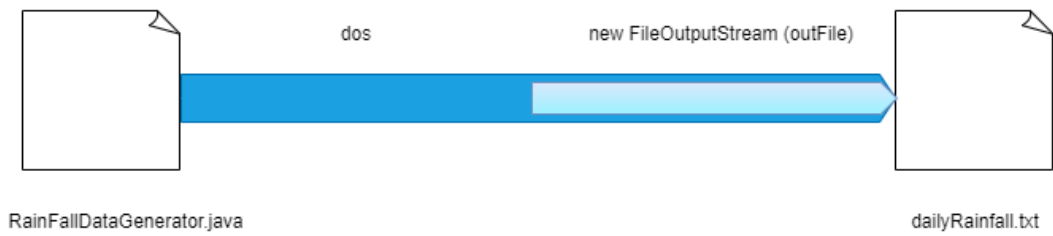


```
58      } catch (Exception ex) {  
  
<terminated> RainFallDataReader [Java Application] C:\Users\User\Downloads\eclipse\plugins\org  
Reading data from dailyRainfall.txt  
  
31/05/2023      5.0  
01/06/2023      0.0  
02/06/2023      0.0  
03/06/2023      4.0  
04/06/2023      1.0  
05/06/2023      0.0  
  
Average rainfall for 6 days: 1.7mm  
End of program.
```

Design:

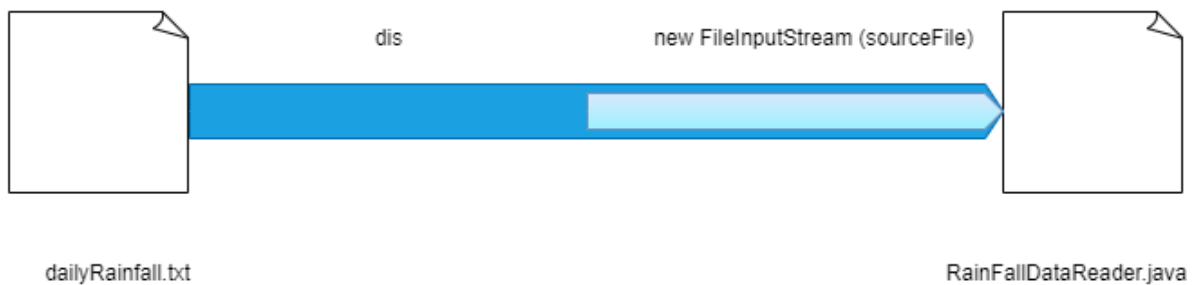
Task A: describe Java I/O interaction to create the data using `java.io.DataOutputStream`

Stream Interaction



Task C: The first describes Java I/O interaction to consume the data. The second diagram shall describe the Java classes that will display rainfall data and compute the average of the rainfall for 6 days.

Stream Interaction



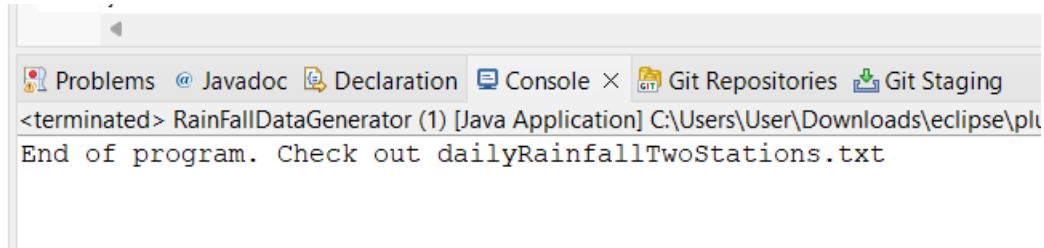
Class Diagram



EXERCISE 6

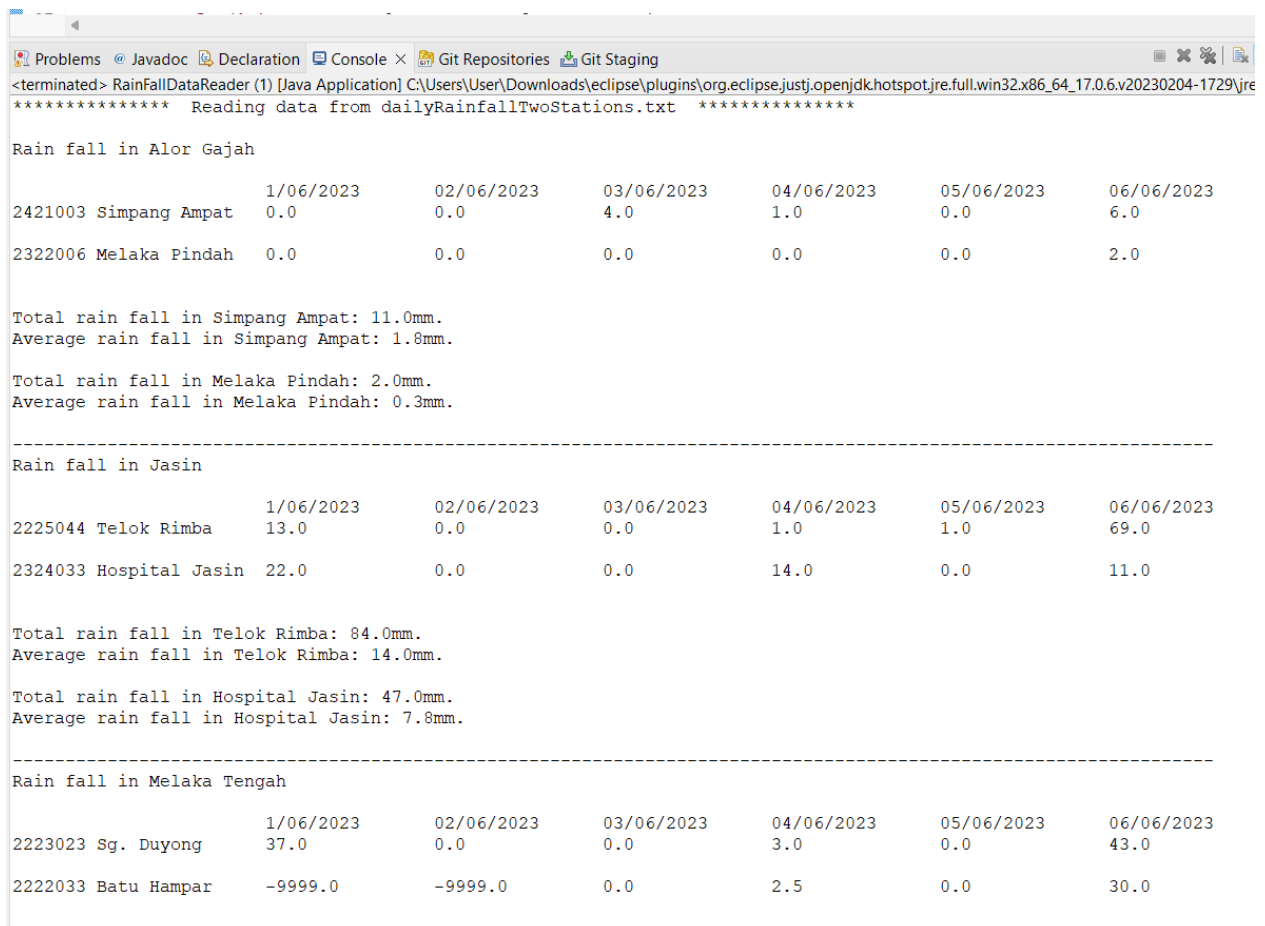
screen shot of output

RainFallDataGenerator.java



```
<terminated> RainFallDataGenerator (1) [Java Application] C:\Users\User\Downloads\eclipse\pl  
End of program. Check out dailyRainfallTwoStations.txt
```

RainFallDataReader.java



```
<terminated> RainFallDataReader (1) [Java Application] C:\Users\User\Downloads\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.6.v20230204-1729\jre  
***** Reading data from dailyRainfallTwoStations.txt *****  
  
Rain fall in Alor Gajah  


|                       | 1/06/2023 | 02/06/2023 | 03/06/2023 | 04/06/2023 | 05/06/2023 | 06/06/2023 |
|-----------------------|-----------|------------|------------|------------|------------|------------|
| 2421003 Simpang Ampat | 0.0       | 0.0        | 4.0        | 1.0        | 0.0        | 6.0        |
| 2322006 Melaka Pindah | 0.0       | 0.0        | 0.0        | 0.0        | 0.0        | 2.0        |

  
Total rain fall in Simpang Ampat: 11.0mm.  
Average rain fall in Simpang Ampat: 1.8mm.  
  
Total rain fall in Melaka Pindah: 2.0mm.  
Average rain fall in Melaka Pindah: 0.3mm.  
  
-----  
Rain fall in Jasin  


|                        | 1/06/2023 | 02/06/2023 | 03/06/2023 | 04/06/2023 | 05/06/2023 | 06/06/2023 |
|------------------------|-----------|------------|------------|------------|------------|------------|
| 2225044 Telok Rimba    | 13.0      | 0.0        | 0.0        | 1.0        | 1.0        | 69.0       |
| 2324033 Hospital Jasin | 22.0      | 0.0        | 0.0        | 14.0       | 0.0        | 11.0       |

  
Total rain fall in Telok Rimba: 84.0mm.  
Average rain fall in Telok Rimba: 14.0mm.  
  
Total rain fall in Hospital Jasin: 47.0mm.  
Average rain fall in Hospital Jasin: 7.8mm.  
  
-----  
Rain fall in Melaka Tengah  


|                     | 1/06/2023 | 02/06/2023 | 03/06/2023 | 04/06/2023 | 05/06/2023 | 06/06/2023 |
|---------------------|-----------|------------|------------|------------|------------|------------|
| 2223023 Sg. Duyong  | 37.0      | 0.0        | 0.0        | 3.0        | 0.0        | 43.0       |
| 2222033 Batu Hampar | -9999.0   | -9999.0    | 0.0        | 2.5        | 0.0        | 30.0       |


```

```

Total rain fall in Sg. Duyong: 83.0mm.
Average rain fall in Sg. Duyong: 13.8mm.

Total rain fall in Batu Hampar: -19965.5mm.
Average rain fall in Batu Hampar: -3327.6mm.

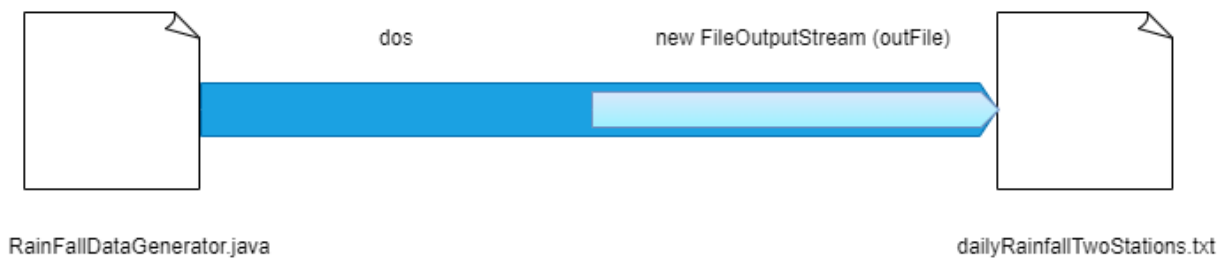
***** END OF PROGRAM *****

```

Design:

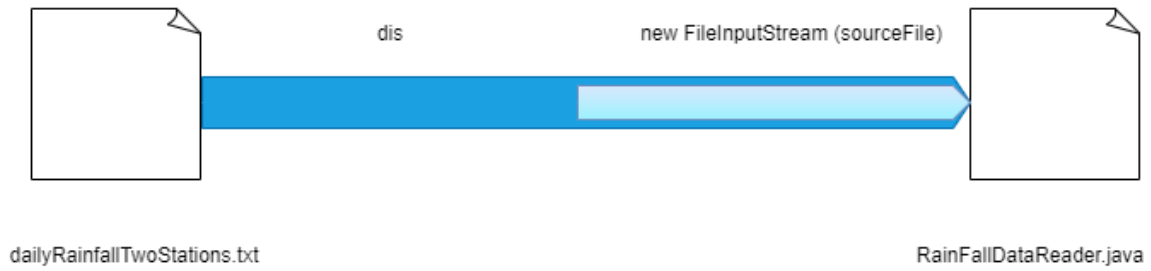
Task A: describe Java I/O interaction to create the data using `java.io.DataOutputStream`

Stream Interaction



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Stream Interaction



Class Diagram

