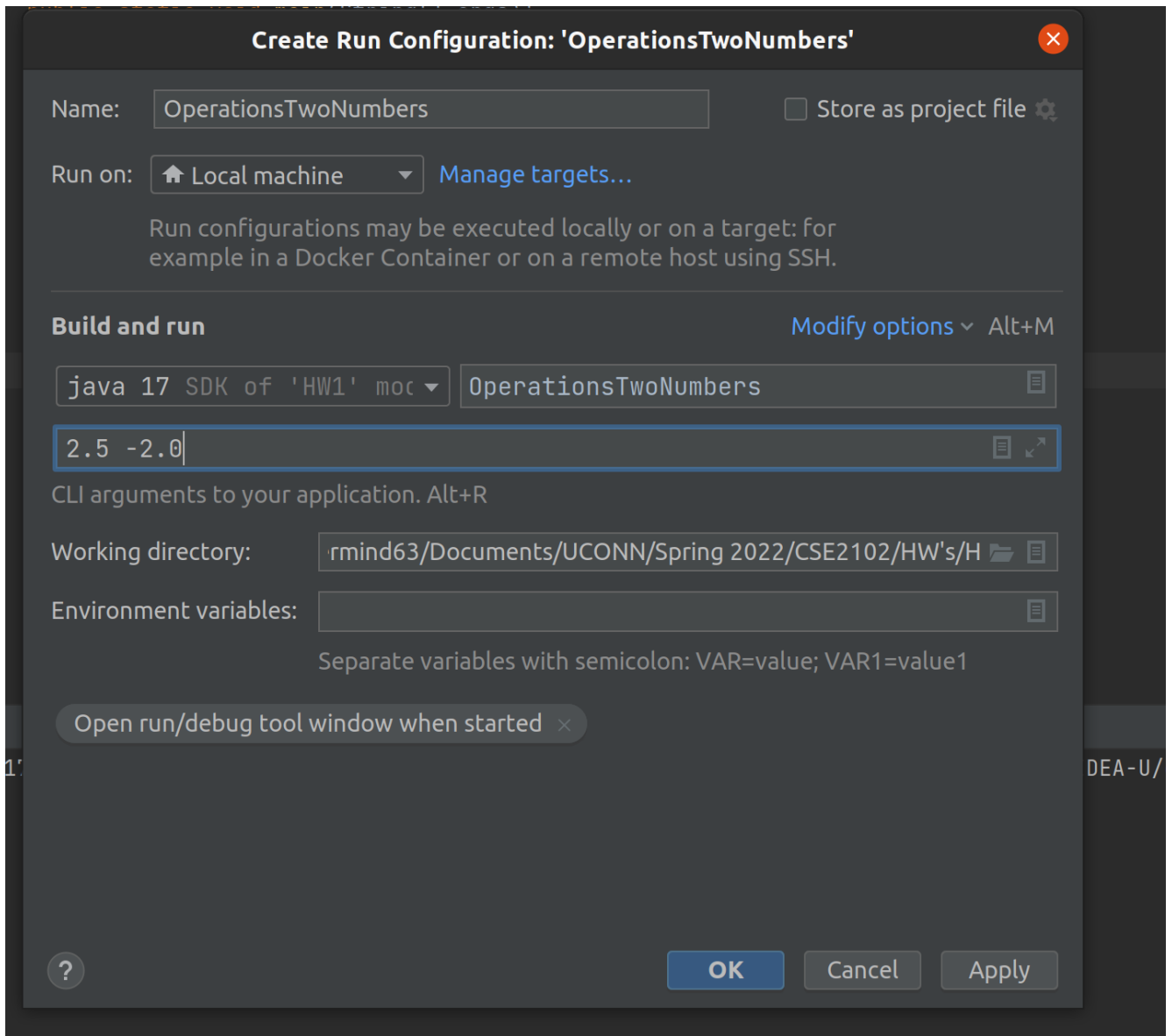


2102 HW1

Homework 1

Question 1: Number Calculations

- The Program Accepts both Positive and Negative Numbers



```
/home/mastermind63/.jdk/openjdk-17.0.2/bin/java -j
The sum of the two numbers is: 0.5
The difference of the two numbers is: 4.5
The product of the two numbers is: -5.0
The quotient of the two numbers is: -1.25
The exponentiation of the two numbers is: 0.16

Process finished with exit code 0
```

Edit Run Configuration: 'OperationsTwoNumbers'

Name:

☐ Store as project file

Run on:

Local machine

[Manage targets...](#)

Run configurations may be executed locally or on a target: for example in a Docker Container or on a remote host using SSH.

Build and run [Modify options](#) Alt+M

java 17 SDK of 'HW1' moc

OperationsTwoNumbers

4.0 20.0

Press Alt for field hints

Working directory:

rmind63/Documents/UCONN/Spring 2022/CSE2102/HW's/H

Environment variables:

Separate variables with semicolon: VAR=value; VAR1=value1

Open run/debug tool window when started

OK

Cancel

Apply

OperationsTwoNumbers x

```
/home/mastermind63/.jdk/openjdk-17.0.2/bin/java -javaagent:/home
```

```
The sum of the two numbers is: 24.0
```

```
The difference of the two numbers is: -16.0
```

```
The product of the two numbers is: 80.0
```

```
The quotient of the two numbers is: 0.2
```

```
The exponentiation of the two numbers is: 1.099511627776E12
```

```
Process finished with exit code 0
```

Question 2: Triangle Area

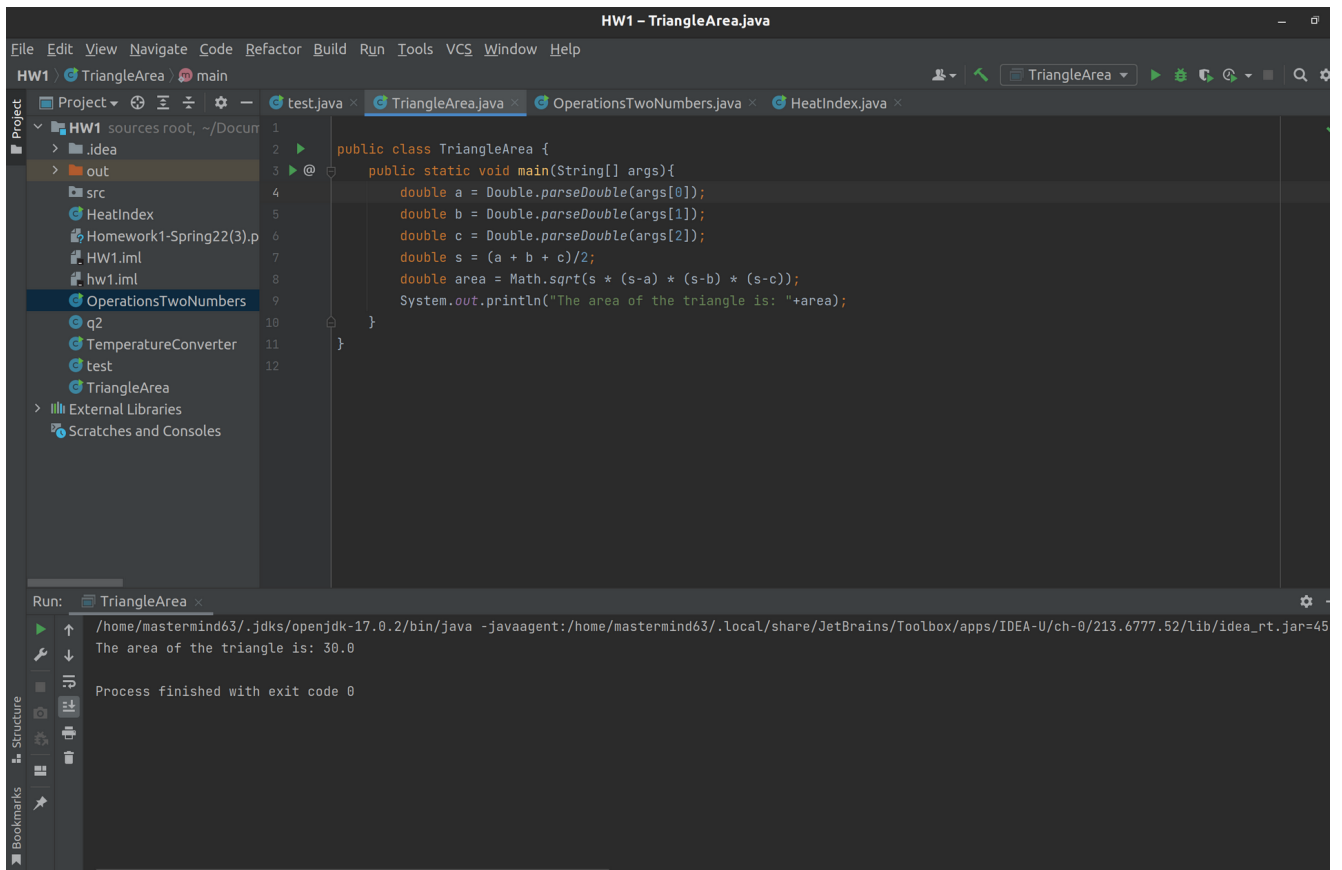
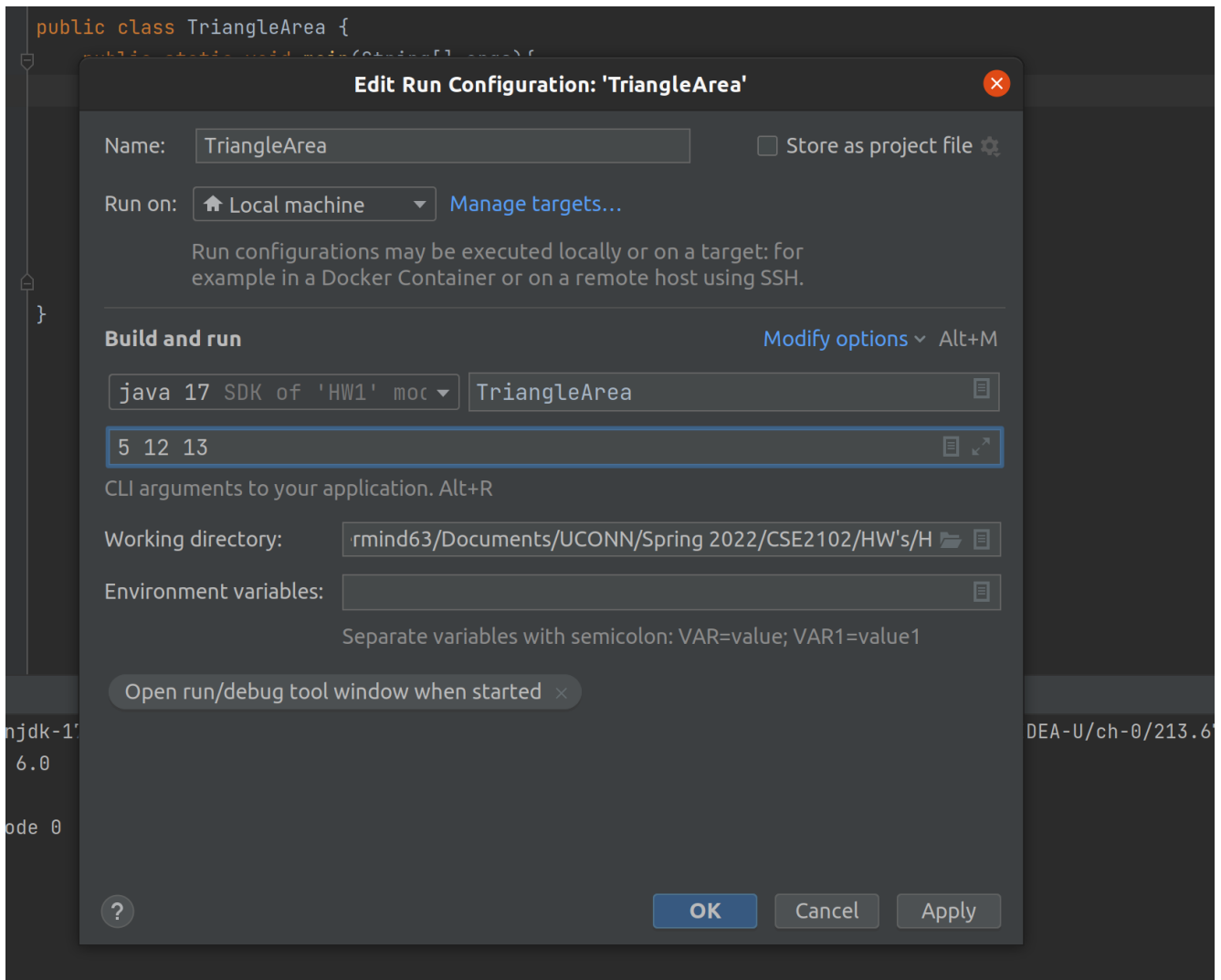
TestCases

- Testcase for 3, 4, 5

```
The area of the triangle is: 6.0
```

```
Process finished with exit code 0
```

- Testcase for 5 12 13



Question 3: Temperature Converter

Name: ☐ Store as project file

Run on: Local machine [Manage targets...](#)

Run configurations may be executed locally or on a target: for example in a Docker Container or on a remote host using SSH.

Build and run Modify options Alt+M

java 17 SDK of 'HW1' module TemperatureConverter

Press Alt for field hints

Working directory:

Environment variables:


Separate variables with semicolon: VAR=value; VAR1=value1

☐ Open run/debug tool window when started

OK Cancel Apply

```
/home/mastermind63/.jdk/openjdk-17.0.2
The Temperature in Celsius is: 10.0


Process finished with exit code 0
```



Name: ☐ Store as project file 

Run on: Local machine ▼ [Manage targets...](#)



Run configurations may be executed locally or on a target: for example in a Docker Container or on a remote host using SSH.


Build and run Modify options ▼ Alt+M




 


CLI arguments to your application. Alt+R

Working directory:  

Environment variables: 

Separate variables with semicolon: VAR=value; VAR1=value1

☐ Open run/debug tool window when started 



```
TemperatureConverter x
/home/mastermind63/.jdk/openjdk-17.0.2/bin/java -javaagent:/hom
The Temperature in Celsius is: 32.22222222222222

Process finished with exit code 0
```

Question 4: Heat Index

Edit Run Configuration: 'HeatIndex'



Name:

☐ Store as project file

Run on: Local machine [Manage targets...](#)

Run configurations may be executed locally or on a target: for example in a Docker Container or on a remote host using SSH.

Build and run

[Modify options](#) **Alt+M**

java 17 SDK of 'HW1' mod

Press Alt for field hints

Working directory:

Environment variables:

Separate variables with semicolon: VAR=value; VAR1=value1

☐ Open run/debug tool window when started



OK

Cancel

Apply

HeatIndex

```
/home/mastermind63/.jdk/openjdk-17.0.2/bin/java -javaagent
```

```
Temperature: 32.0 degree celsius
```


```
Relative Humidity: 85.0
```


```
Heat Index: -64.85562286727493
```

```
Process finished with exit code 0
```

Edit Run Configuration: 'HeatIndex'

Name:



☐ Store as project file 



Run on: Local machine  [Manage targets...](#)

Run configurations may be executed locally or on a target: for example in a Docker Container or on a remote host using SSH.



Build and run

[Modify options](#)  Alt+M

java 17 SDK of 'HW1' moc  


 

Press Alt for field hints

Working directory:  

Environment variables:

Separate variables with semicolon: VAR=value; VAR1=value1



☐ Open run/debug tool window when started 



OK

Cancel

Apply

 HeatIndex 

```
/home/mastermind63/.jdk/openjdk-17.0.2/bin/java -javaagent:/home/rmind63/
Temperature: 90.0 degree celsius
Relative Humidity: 75.0
Heat Index: 582.8972088332054

Process finished with exit code 0
```


HeatIndex x

```
/home/mastermind63/.jdk/openjdk-17.0.2/bin/java -javaagent:/home/r
Temperature:    90.0 degree celsius
Relative Humidity:  75.0
Heat Index: 582.8972088332054

Process finished with exit code 0
```

HeatIndex x

```
/home/mastermind63/.jdk/openjdk-17.0.2/bin/java -javaagent:/home/r
Temperature:    90.0 degree celsius
Relative Humidity:  75.0
Heat Index: 582.8972088332054

Process finished with exit code 0
```

This should be able to be coded as static final since they are non-mutable values and will not be accessed or changed throughout the running of the code.

My code gives a strange number for heat index, despite my checking the formula and logic of the problem.... it should work? If I have time to do so, I will submit a later one that works