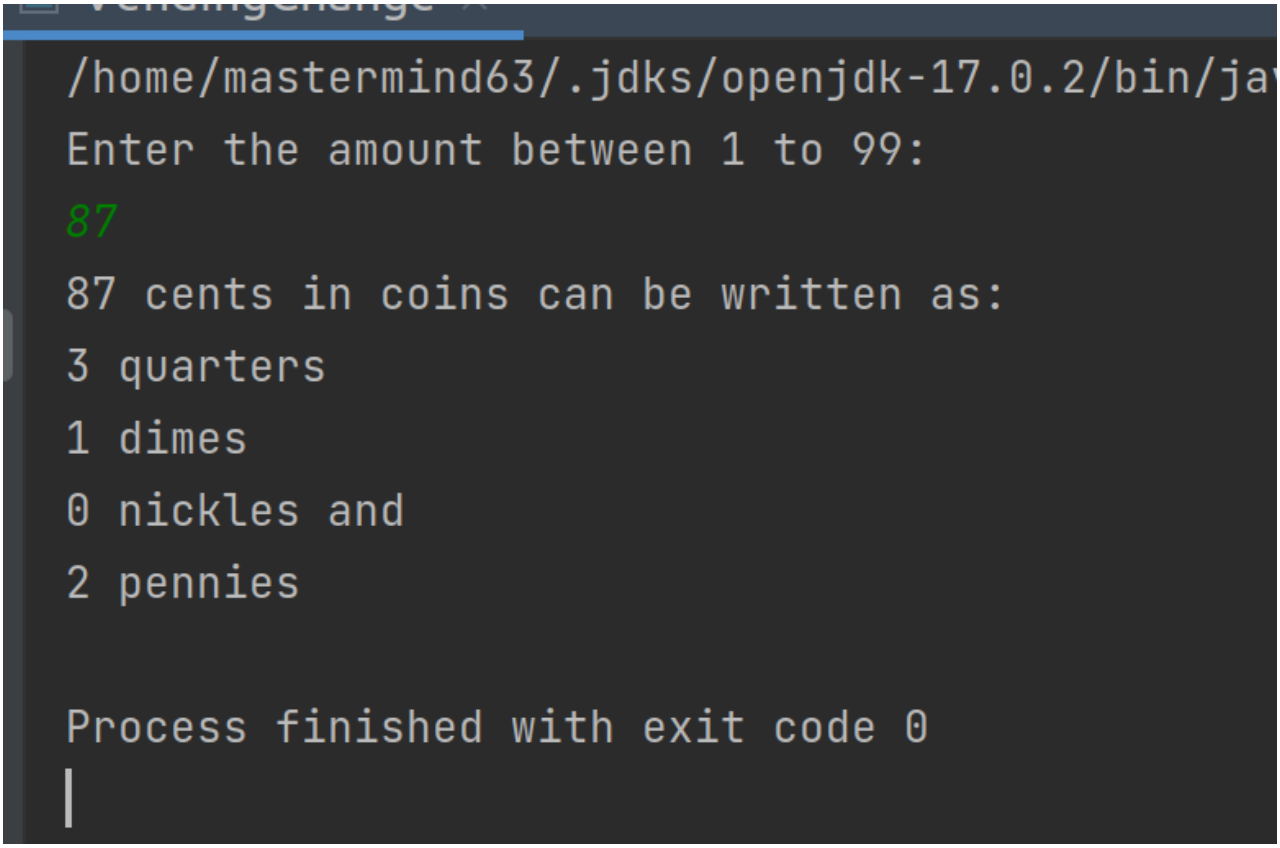
2102 HW2

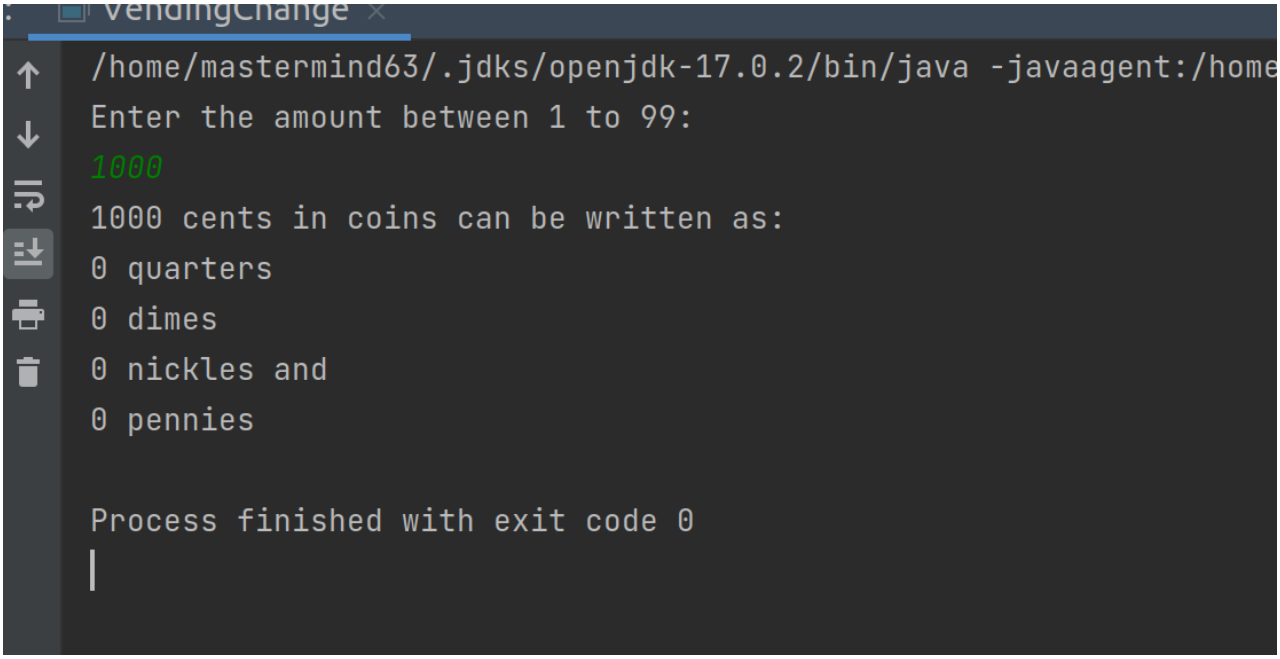
Homework 1

Question 1:

Testcases for Question 1:

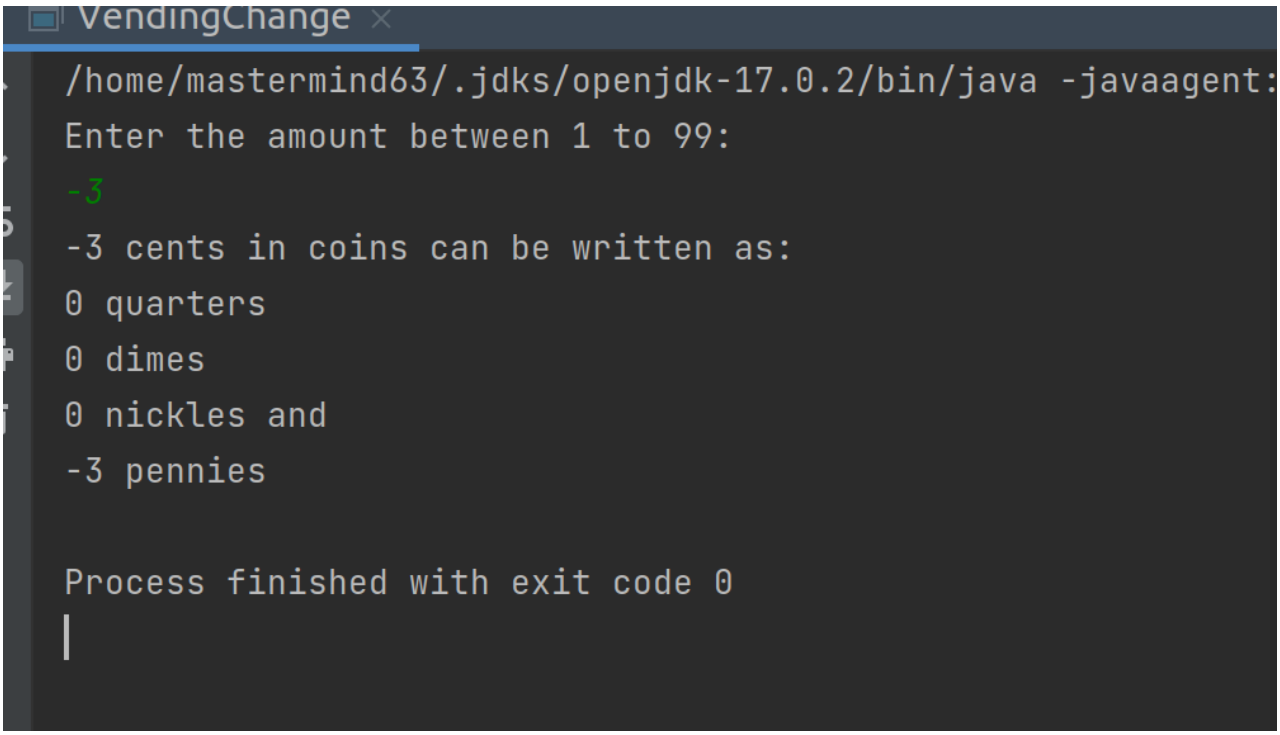
- Number within the specified range
  - 

- Number Outside of the specified range



- This makes sense because it gets caught by my test case in the while loop

- Negative Number



- Case will always make the number of items in reverse

Question 2:

- Testcase for Cat Hat

```
/home/mastermind63/.jdks/openjdk-17.0.2/bin/java
Enter the first string:
Cat
Enter the second string:
Hat
The concatenated string is: cathat
The length of the concatenated string is: 6

Process finished with exit code 0
```

- Test for a much longer string

```
/home/mastermind63/.jdks/openjdk-17.0.2/bin/java -javaagent:/home/mastermind63/.local/share/JetBrains/Toolbox/apps/IDEA-U/ch-0/213.6777.52/lib/idea_r
Enter the first string:
this is the first one I'm doing and its long
Enter the second string:
This one will likely be even longer, I wonder what will happen
The concatenated string is: this is the first one i'm doing and its longthis one will likely be even longer, i wonder what will happen
The length of the concatenated string is: 106

Process finished with exit code 0
```

- Test for numeric one

```
Run: StringConcat
/home/mastermind63/.jdks/openjdk-17.0.2/bin/java -javaagent:/home/mastermind63/.local/share/JetBrains
Enter the first string:
123
Modify Run Configuration...
string:
The concatenated string is: 123456
The length of the concatenated string is: 6

Process finished with exit code 0
```

Question 3:

- Testcase 1

```
/home/mastermind63/.jdks/openjdk-17.0.2/bin/jav
Enter the first file:
words.txt
Enter the second file:
out.txt

Process finished with exit code 0
```

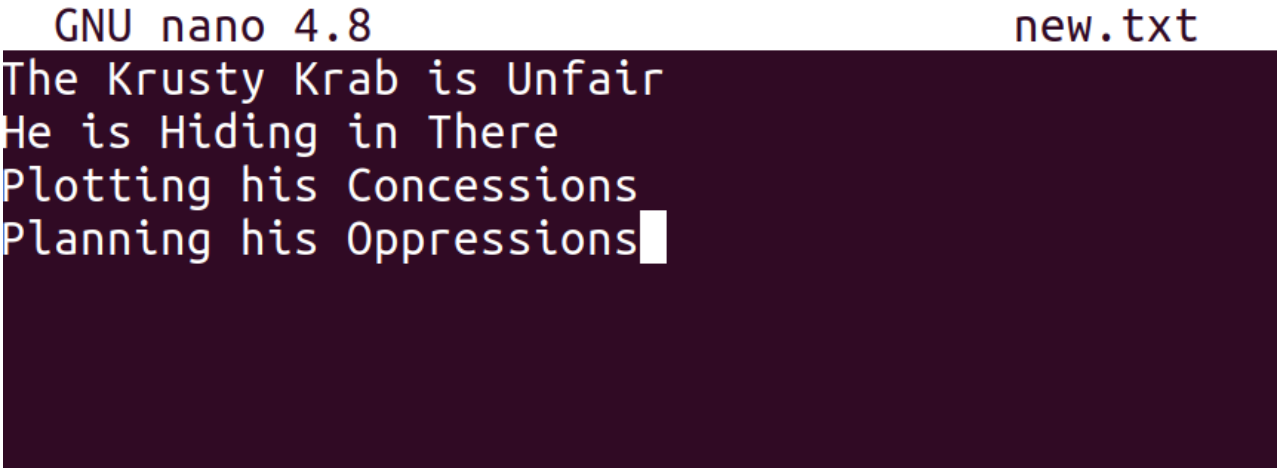
- Input File

```
  GNU nano 4.8                                  words.txt
This is the first line of the thing
The Second line starts here
if Placement matters to you
Then Ok?
```

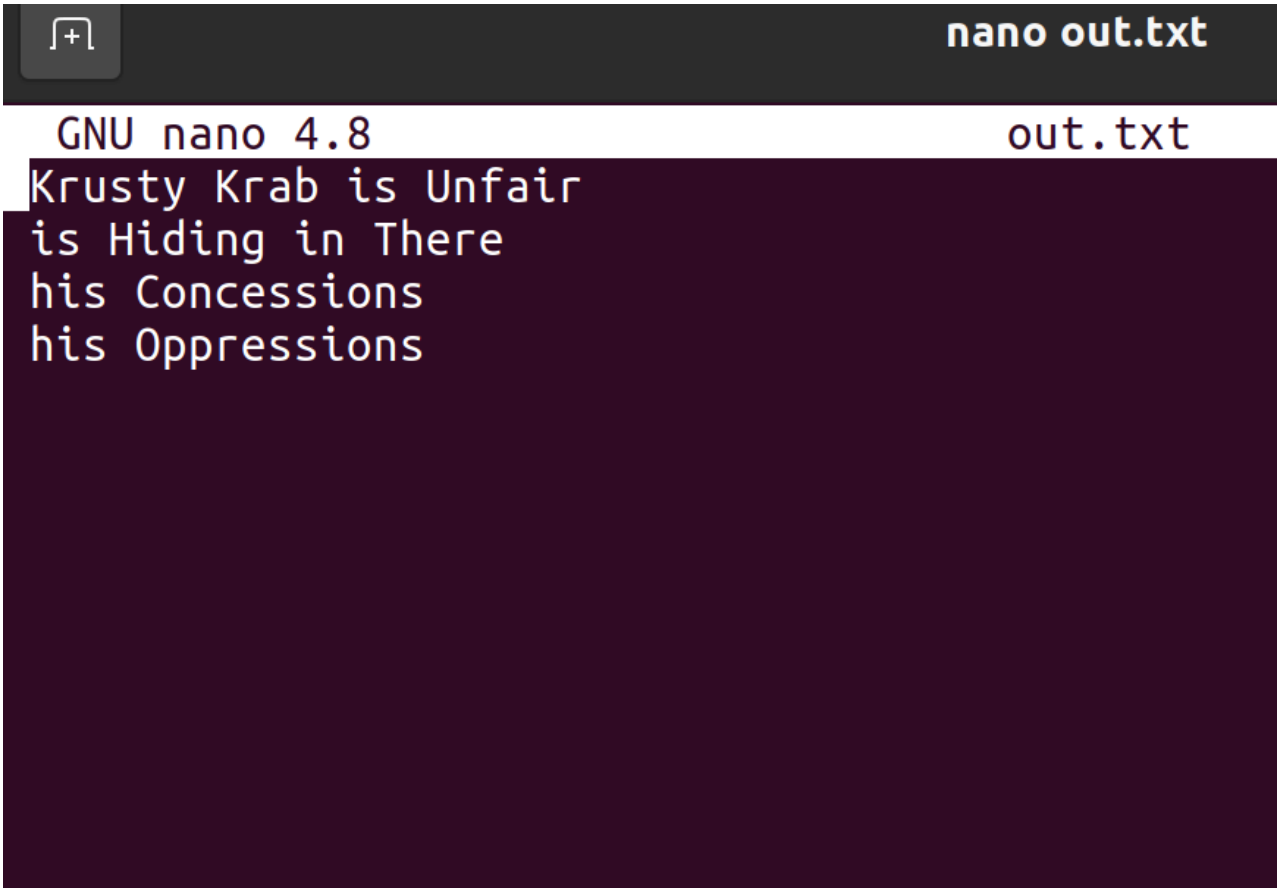
- Output File

```
  GNU nano 4.8
 is the first line of the thing
 Second line starts here
 Placement matters to you
 Ok?
```

- Testcase 2
  - Input File
    *



- Output File



Question 4:

The Problem with question 3 is twofold. The way I did it splits on a " " character, however that could just as easily be any other character, or if someone was writing in a different language which did not use space as punctuation, it would not work. In addition to this, compared to past problems it was less clear exactly what to do with number 3 because of this splitting and removing the first word. Technically something you and I know as the first word could be not a word in other languages. In addition, the specifications for fileIO were less specific, without using code from the previous lab for reading and writing it would have been fairly difficult to get the desired result. When software engineers make code, the goal is to make it modular so it can be used in a variety of scenarios, so allowing for other split characters aside from spaces could be another good step towards dealing with large ammounts of data.