

A.I. for Software Testing & Reverse Engineering – CS4110

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Docker Run

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```
docker run -it CONTAINER_NAME /bin/bash
```

Copy the RERS problems in the docker container

B E **Buggy_RERS_ASTOR.zip**
home/str/
F E H
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Build the buggy RERS problem

I A **Problem1_buggy**
I **/home/str**

```
cd /home/str/
```

Problem1_buggy
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(maven pom file)

E

(contains dependencies to run the test)

(source code of the buggy version of Problem1.java)
(it contains the test case Problem1.java)
(it contains the binaries)

```
cd /home/str/Problem1_buggy
mvn clean
mvn install -DskipTests
```

Run ASTOR

```
F          A          F          /home/str/          astor
rm -r astor
```

```
A
git clone https://github.com/SpoonLabs/astor.git
```

```
A
mvn install -DskipTests=true
```

```
mvn dependency:build-classpath -B | egrep -v "(\^[INFO\]|^\[WARNING\])" | tee
/tmp/astor-classpath.txt
```

```
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```
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```
cd /home/str/astor
```

```
java -cp $(cat /tmp/astor-classpath.txt):target/classes fr.inria.main.evolution.AstorMain -
mode jgenprog -srcjavafolder /src/main/java/ -src_testfolder /src/test/java/ -
binjavafolder /target/classes/ -bin_testfolder /target/test-classes/ -location
/home/str/Problem1_buggy/ -maxtime 5 -maxgen 3000 -scope local -population 8 -
operatorspace relational-Logical-op
```

```
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A          output-astor
```

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- ```
A
1) java -cp $(cat /tmp/astor-classpath.txt):target/classes
A
2) fr.inria.main.evolution.AstorMain
3) -mode jgenprog
I G J
4) -srcjavafolder
```

- |
- 5) -srctestfolder
- |
- 6) -binjavafolder
- |
- 7) -bintestfolder
- |
- 8) -location
- |
- 9) -maxtime                      Problem1\_buggy                      |  
                                                                                                 /home/str/Problem1\_buggy
- 10) -maxgen 3000
- 11) -scope
- 12) -population 8
- 13) -operatorspace

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**NB: In this guide, we used only Problem1\_buggy as an instance. You can follow the same procedure for the other programs. You would need to update the parameter -location for ASTOR**