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# Robocode

Introdução



# Instalação

Algoritmos — Tadeu Ferreira - Mozilla Firefox

Algoritmos — Tadeu Ferreira

docente.ifrn.edu.br/tadeuferreira/disciplinas/2013.2/algoritmos

BRASIL

Início Acessibilidade

Buscar no Site

**Tadeu Ferreira**  
INSTITUTO FEDERAL DE  
EDUCAÇÃO, CIÊNCIA E TECNOLOGIA  
DO GRANDE DO NORTE

**Algoritmos**

Materiais da disciplina de Algoritmos para a turma de Informática do 1º ano

**Slides**

- Aula 00
- Aula 01

**Atividades**

- [Instalador do Robocode](#)

**Links**

- [Página do Robocode](#)
- [VisuAlg](#)

**« Novembro 2013 »**

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Email: comunicacao\_reitoria@ifrn.edu.br  
Telefone: 4005-0757  
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f t y

# Download

The screenshot shows a Firefox browser window with the address bar displaying `docente.ifrn.edu.br/tadeuferreira/disciplinas/2013.2/algortimos`. The page content includes a sidebar with a navigation menu, a main section titled "Algoritmos" with sub-sections for "Slides", "Atividades", and "Links", and a calendar for November 2013. A dialog box titled "Abrir 'robocode-1.8.3.0-setup.jar'" is open, showing the file type as "Pacote Java (5,1MB)" and the site as `http://docente.ifrn.edu.br`. The dialog offers options to "Abrir com o:" (set to "Download") or "Memorizar a decisão para este tipo de arquivo".

**Algoritmos**  
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**Slides**

- Aula 00
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**Atividades**

- [Instalador do Robocode](#)

**Links**

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**Calendar: Novembro 2013**

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Terminal

Algoritmos — Tadeu Ferreira

docente.ifrn.edu.br/tadeuferreira/disciplinas/2013.2/algoritmos

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Início Acessibilidade

2780796@sga190356l: ~/Downloads

```
2780796@sga190356l:~$ cd Downloads/  
2780796@sga190356l:~/Downloads$ java -jar robocode.jar
```

Use o atalho:  
CTRL+ALT+T  
Para abrir o terminal

Digite os seguintes comandos:  
cd Downloads  
java -jar robocode.jar

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f t y

Installing Robocode

```
2780796@sga190356l:~$ cd Downloads/  
2780796@sga190356l:~/Downloads$ java -jar robocode.jar
```

Installing Robocode  
Robocode will be installed in:  
/home/2780796/robocode  
Is this ok?

Cancelar Não **Sim**

Inicie a instalação clicando em Sim

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The screenshot shows a Linux desktop environment with a terminal window and a file manager window. The terminal window displays the following commands and output:

```
2780796@sga190356l:~$ cd Downloads/  
2780796@sga190356l:~/Downloads$ java -jar robocode.jar
```

The file manager window shows a directory structure with the following items:

- Início
- Avisos
- Disciplinas
  - 2012.1
  - PRONATEC
  - 2012.2
  - 2013.1
  - 2013.2
- Modelo de Relatórios
- Cabeamento Estruturado
- Introdução a Sistemas Abertos
- Algoritmos
  - Aula00.pdf
  - robocode.jar

A dialog box titled "Installing Robocode" is open, asking: "/home/2780796/robocode does not exist. Would you like to create it?". The "Sim" button is highlighted.

A green callout box contains the text: "Aceite a criação da pasta clicando em Sim".

At the bottom of the desktop, there is contact information for Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Norte | Reitoria, including the address, CEP, email, telephone, and website.

Mensagem

Algoritmos — Tadeu Ferreira

docente.ifrn.edu.br/tadeuferreira/disciplinas/2013.2/algoritmos

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Tadeu Ferreira  
INSTITUTO FEDERAL DE  
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DO RIO GRANDE DO NORTE

```
2780796@sga190356L:~/Downloads  
2780796@sga190356L:~$ cd Downloads/  
2780796@sga190356L:~/Downloads$ java -jar robocode.jar
```

Mensagem

To start Robocode, enter the following at a command prompt:  
/home/2780796/robocode/robocode.sh

Clique em OK

Início  
Avisos  
Disciplinas  
2012.1  
PRONATEC  
2012.2  
2013.1  
Modelo de Relatórios  
2013.2  
Cabeamento Estruturado  
Introdução a Sistemas Abertos  
Algoritmos  
Aula00.pdf  
robocode.jar

« Novembro 2013

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Mensagem

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docente.ifrn.edu.br/tadeuferreira/disciplinas/2013.2/algortimos

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DO RIO GRANDE DO NORTE

```
2780796@sga190356L: ~/Downloads  
2780796@sga190356L:~$ cd Downloads/  
2780796@sga190356L:~/Downloads$ java -jar robocode.jar
```

Mensagem

Installation successful

« Novembro 2013

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Início Acessibilidade

Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Norte

Início

Avisos

Disciplinas

2012.1

PRONATEC

2012.2

2013.1

Modelo de Relatórios

2013.2

Cabeamento Estruturado

Introdução a Sistemas Abertos

Algoritmos

Aula00.pdf


robocode.jar

« Novembro 2013

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```
2780796@sga190356l:~/Downloads$ cd
2780796@sga190356l:~$ cd robocode/
2780796@sga190356l:~/robocode$ ro
robocode rotatelogs route routef routel
2780796@sga190356l:~/robocode$ ro
robocode rotatelogs route routef routel
2780796@sga190356l:~/robocode$ ./robocode.sh
Loaded net.sf.robocode.ui.editor
Loaded net.sf.robocode.battle
No robocode.properties. Using defaults.
Rebuilding robot database...
Saving robot database
```

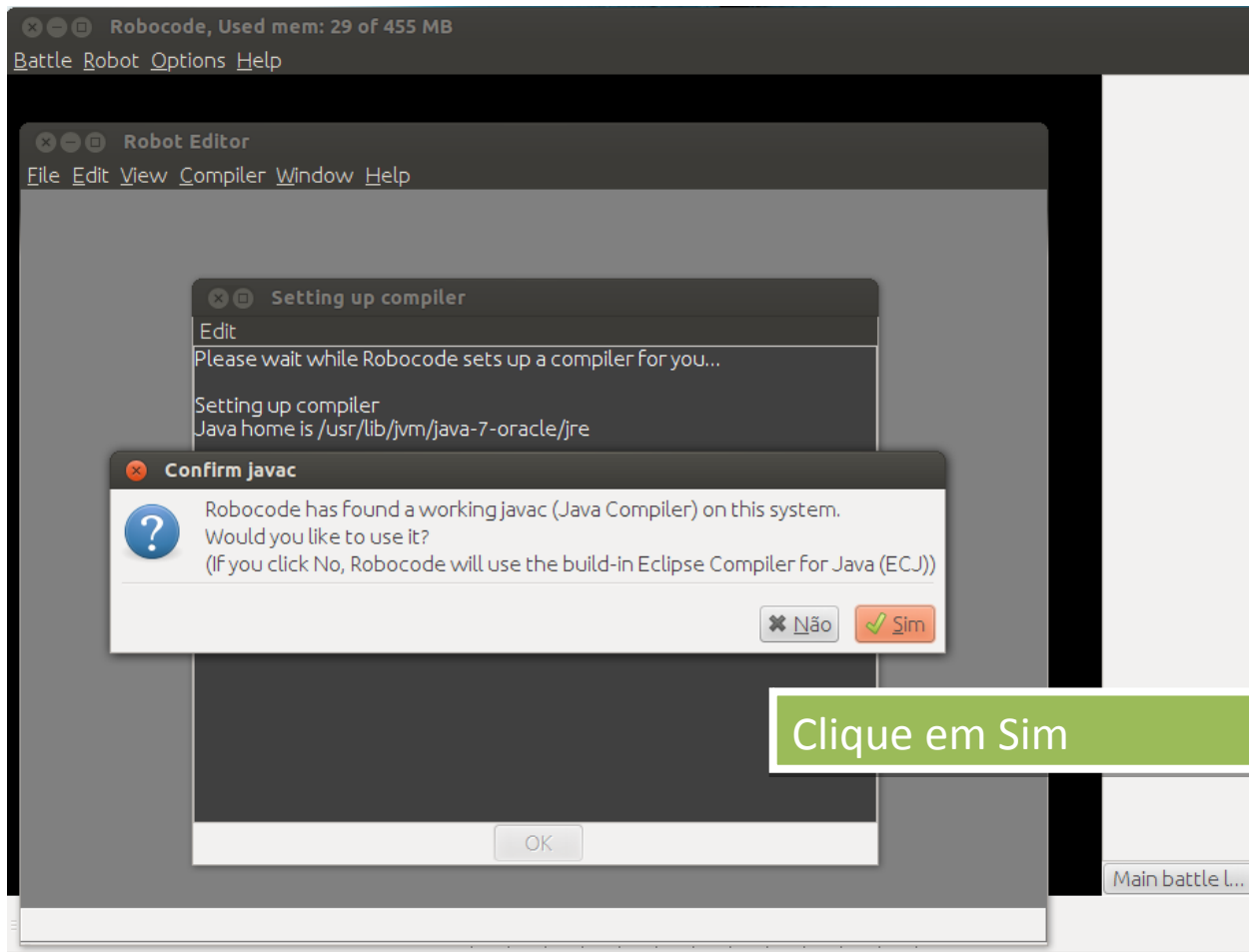


Terminada a instalação,  
volte ao terminal e digite os  
seguintes comandos:

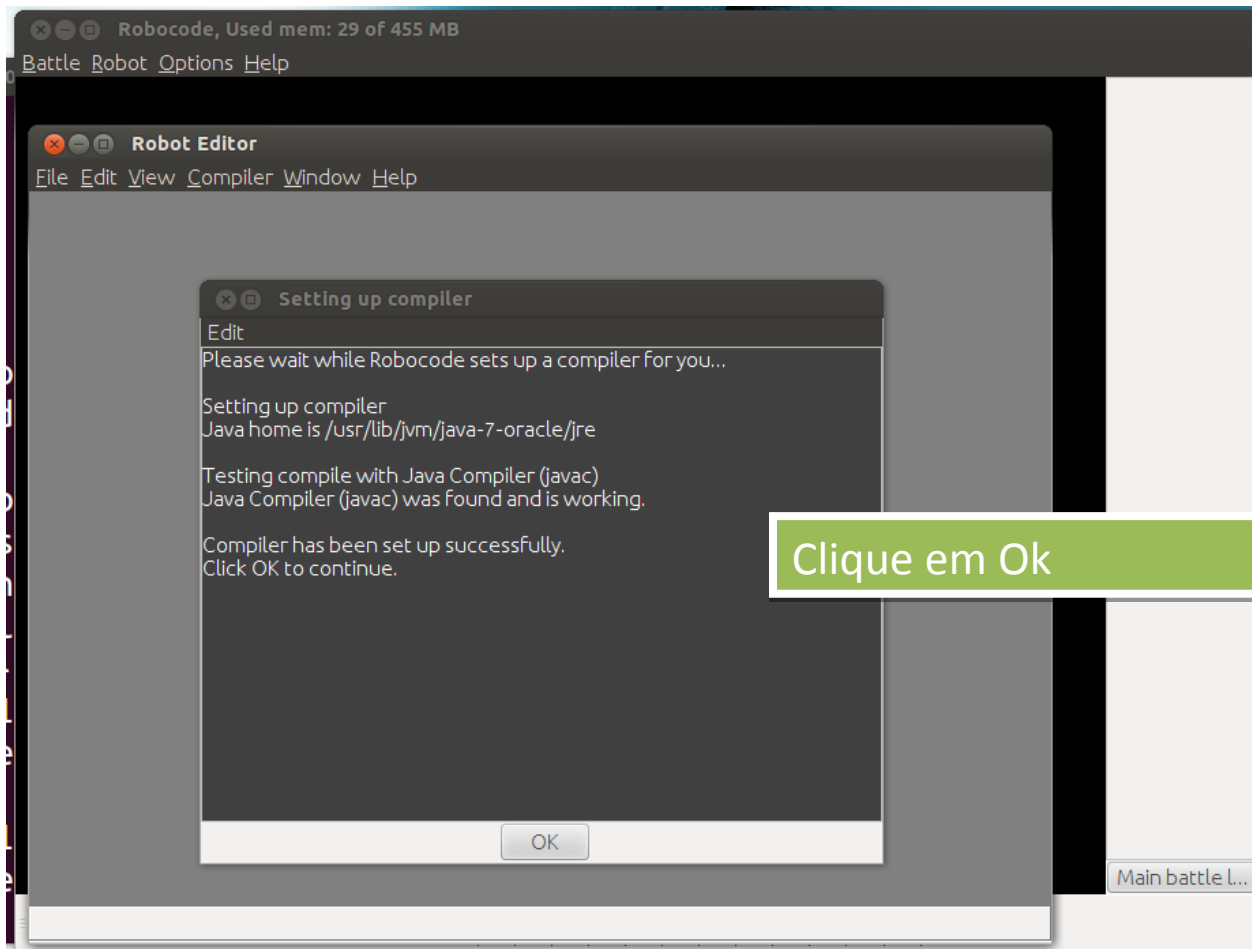
```
cd
cd robocode
./robocode.sh
```



Selezione Robot -> Editor



Clique em Sim



Clique em Ok

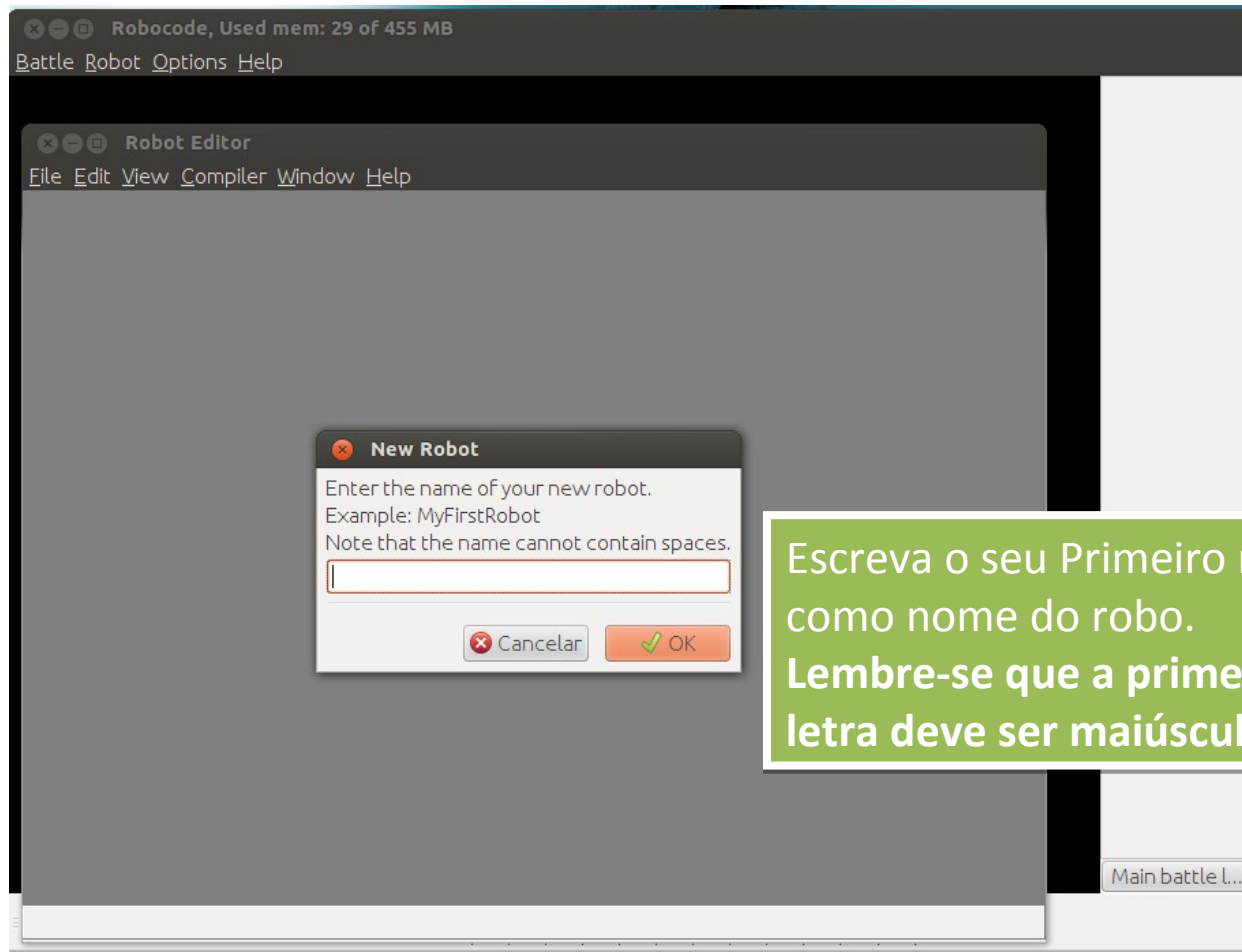
The screenshot shows a desktop environment with the Robocode application running. In the background, a web browser displays the website for Tadeu Ferreira at IFRN. A file explorer window is open, showing a directory structure with folders for years and semesters, and files like 'Aula00.pdf' and 'robocode.jar'. A terminal window in the foreground shows the Robocode command-line interface with the following text:

```
Loaded
Loaded
Loaded
Loaded
Loaded
No robo
Rebuild
Saving
Each ro
this s
Creatin
Prepari
-----
Round 1
Let the
Round 1
Compile
```

A green callout box with white text is overlaid on the terminal, stating: **Escolha File -> New Robot**

At the bottom of the desktop, contact information for Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Norte is provided:

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Escreva o seu Primeiro nome  
como nome do robo.  
Lembre-se que a primeira  
letra deve ser maiúscula

---

**×** New Robot

Enter the name of your new robot.  
Example: MyFirstRobot  
Note that the name cannot contain spaces.

**×** Cancelar **✓** OK

**Exemplo**

---

**Package name for Tadeu**

Enter a short package name for your new robot and without spaces (lower-case letters are preferred). Your initials will work well here.

Your robot will be put into this package to avoid name conflict with other robots. The package name is used to identify your robot(s) in the game, especially if you want to let your robot(s) participate in competitions like e.g. RoboRumble@Home. Hence, you should enter the same package name for all of your robots.

Cancelar OK

Esse é o nome do seu pacote de robôs  
Use as suas iniciais, **todas minúsculas**



The image shows a Java IDE window titled "Create Directory" with a code editor in the background. The code editor displays the following Java code:

```
1 package tfo;
2 import robocode.*;
3 import java.awt.Color;
4
5 // API help : http://robocode.sourceforge.net/docs/robocode/robocode/Robot.html
6
7 /**
8  * Tadeu - a robot by (your name here)
9  */
10 public class Tadeu extends Robot
11 {
12     /**
13     * run: Tadeu's default behavior
14     */
15     public void run() {
16         // Initialization of the robot should be put here
17
18         // After trying out your robot, try uncommenting the import at the top,
19         // and the next line:
20
21         setColors(Color.red,Color.blue,Color.green); // body,gun,radar
22
23         // Robot main loop
24         while(true) {
25             // Replace the next 4 lines with any behavior you would like
26             ahead(100);
27             turnGunRight(360);
28             back(100);
29             turnGunRight(360);
30         }
31     }
32
33     /**
34     * onScannedRobot: What to do when you see another robot
35     */
36     public void onScannedRobot(ScannedRobotEvent e) {
37         // Replace the next line with any behavior you would like
38         fire(1);
39     }
40
41     /**
42     * onHitByBullet: What to do when you're hit by a bullet
43     */
44     public void onHitByBullet(HitByBulletEvent e) {
45         // Replace the next line with any behavior you would like
46         back(10);
47     }
48
49     /**
50     * onHitWall: What to do when you hit a wall
51     */
52     public void onHitWall(HitWallEvent e) {
53         // Replace the next line with any behavior you would like
54         back(20);
55     }
56 }
```

A "Create Directory" dialog box is overlaid on the code editor. The dialog contains the following text:

**Create Directory**

Your robot should be saved in the directory, /home/2780796/robocode/robots/tfo/. This directory does not exist, would you like to create it?

Buttons: Cancelar, Não, Sim

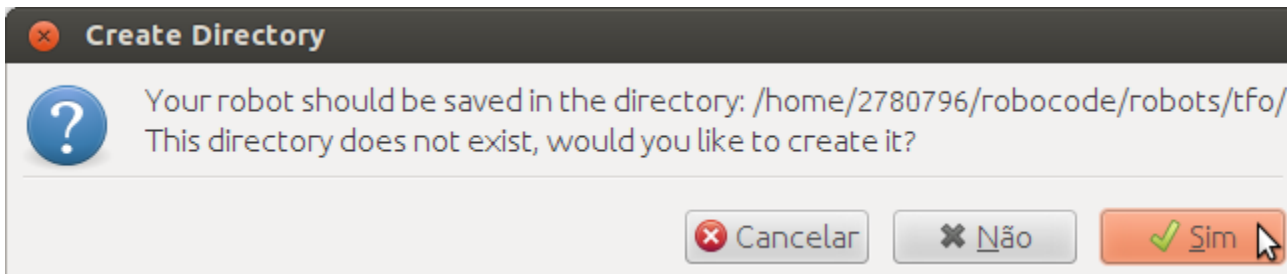
Clique em Ok para criar a pasta onde ficarão os seus robôs

```
Create Directory
File Edit View Compiler Window Help
Editing - Tadeu *
1 package tfo;
2 import robocode.*;
3 import java.awt.Color;
4
5 // API help : http://robocode.sourceforge.net/docs/robocode/robocode/Robot.html
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52     public void onHitWall(HitWallEvent e) {
53         // Replace the next line with any behavior you would like
54         back(20);
55     }
56 }
```

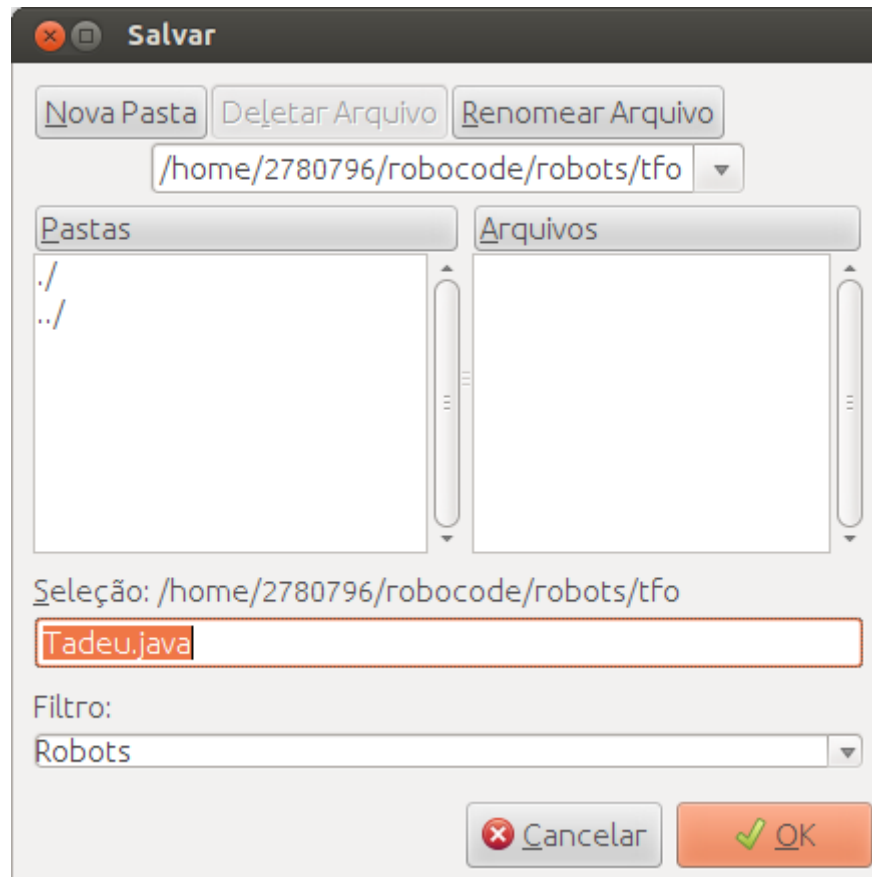
Retire as // do início das linhas 3 e 21

```
Create Directory
File Edit View Compiler Window Help
Editing - Tadeu *
1 package tfo;
2 import robocode.*;
3 import java.awt.Color;
4
5 // API help : http://robocode.sourceforge.net/docs/robocode/robocode/Robot.html
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43     */
44     public void onHitByBullet(HitByBulletEvent e) {
45         // Replace the next line with any behavior you would like
46         back(10);
47     }
48
49     /**
50     * onHitWall: What to do when you hit a wall
51     */
52     public void onHitWall(HitWallEvent e) {
53         // Replace the next line with any behavior you would like
54         back(20);
55     }
56 }
Line: 3 Column: 1
```

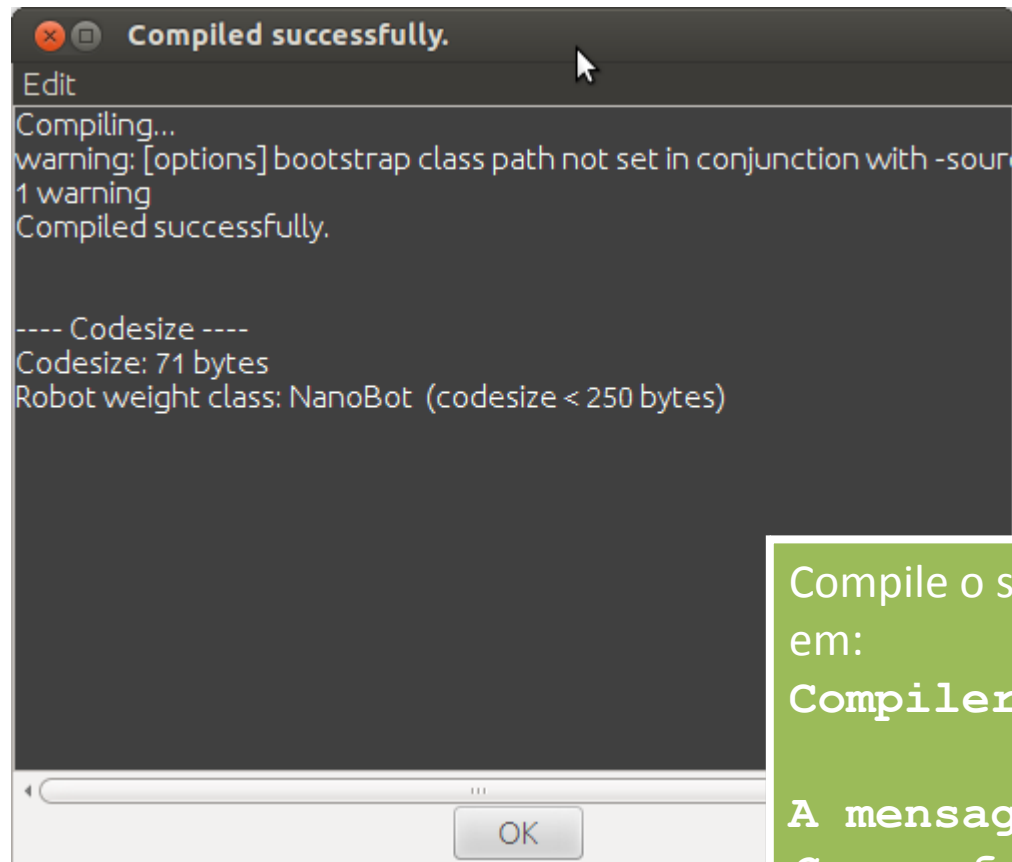
Salve o seu robô clicando em:  
**File -> Save**



Clique em Sim para criar a pasta onde serão salvos os seus Robôs



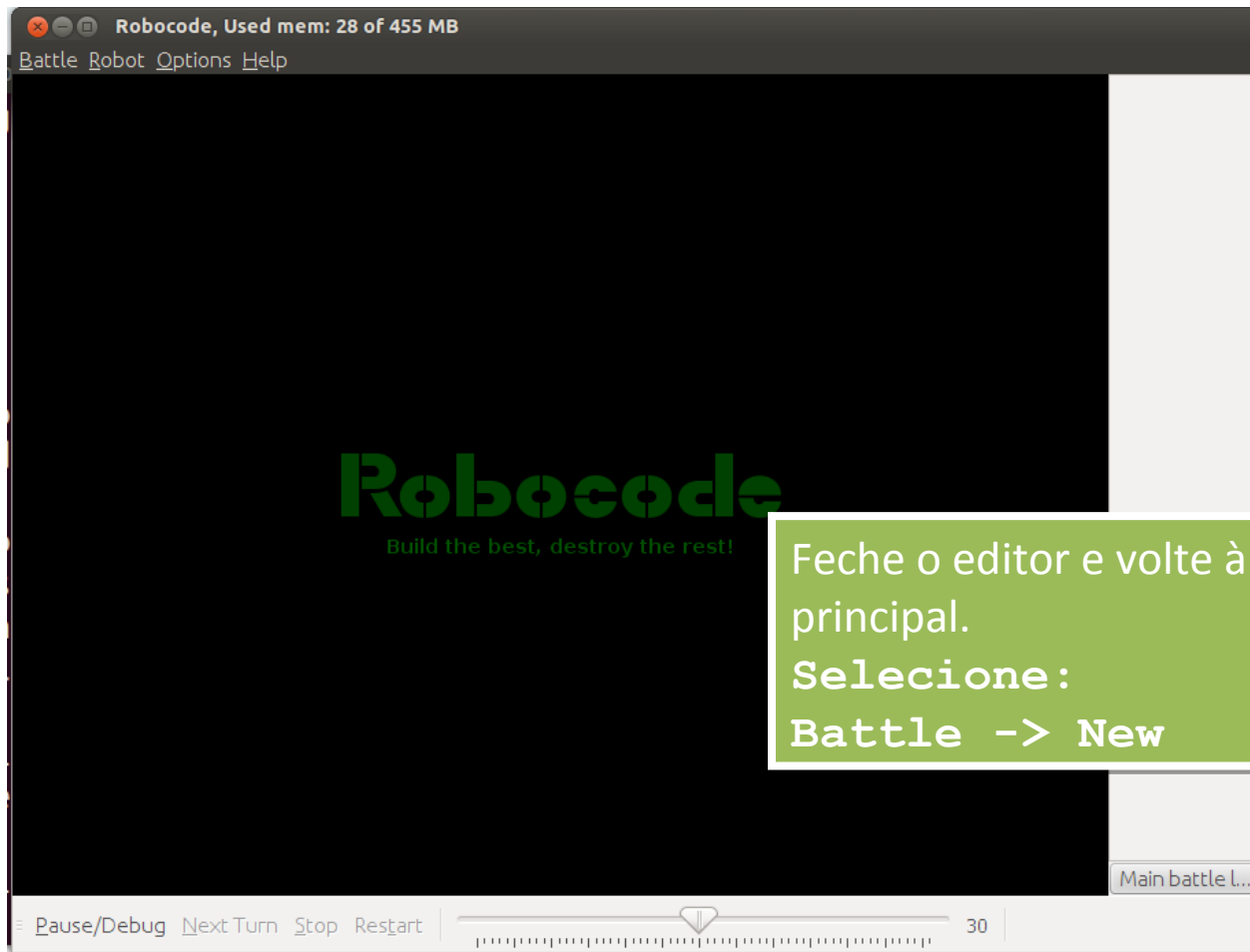
Clique em OK



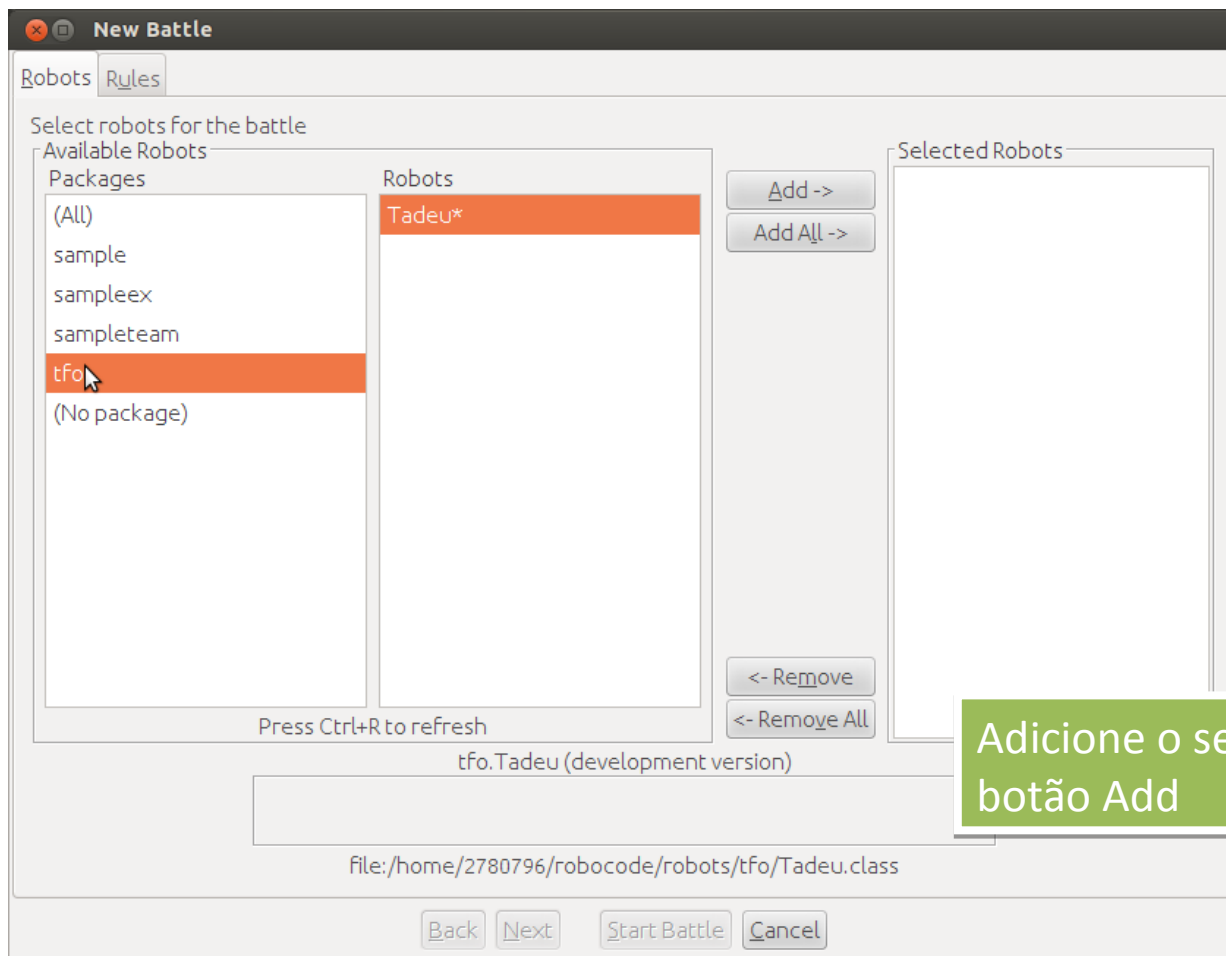
Compile o seu robô clicando em:

`Compiler -> Compile`

A mensagem "*Compiled Successfully*" deve aparecer

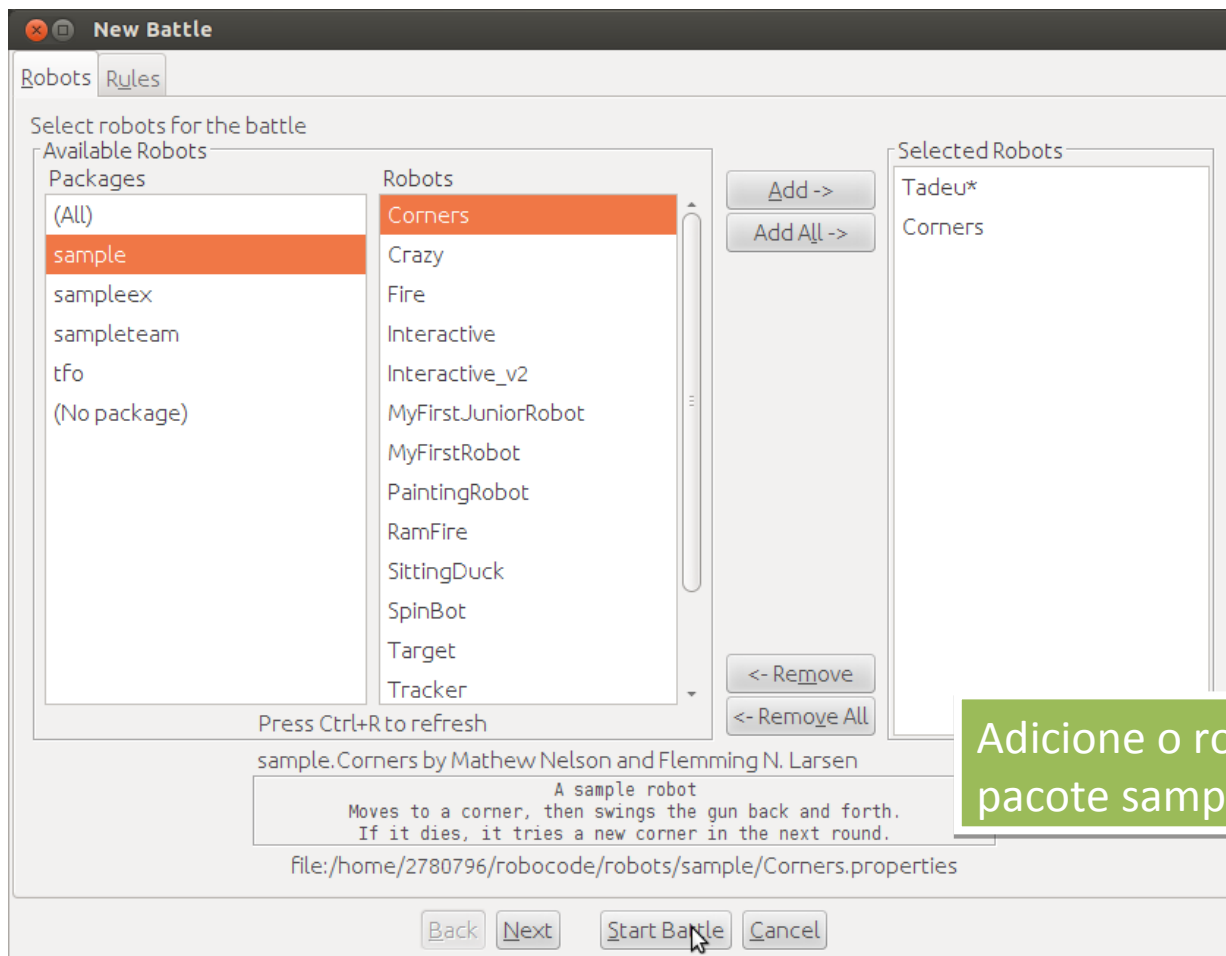


Feche o editor e volte à tela principal.  
Selezione:  
Battle -> New

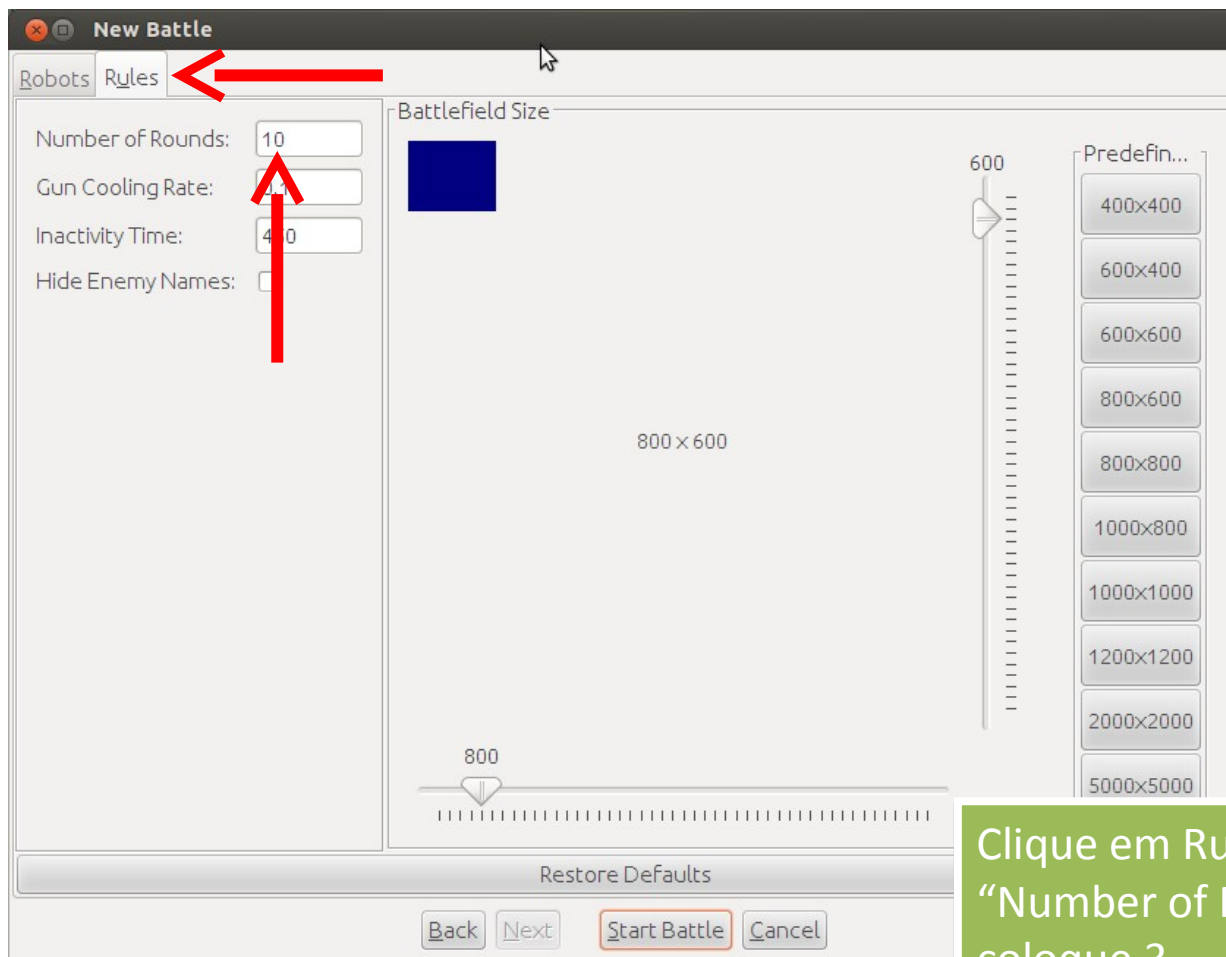


Adicione o seu clicando no botão Add

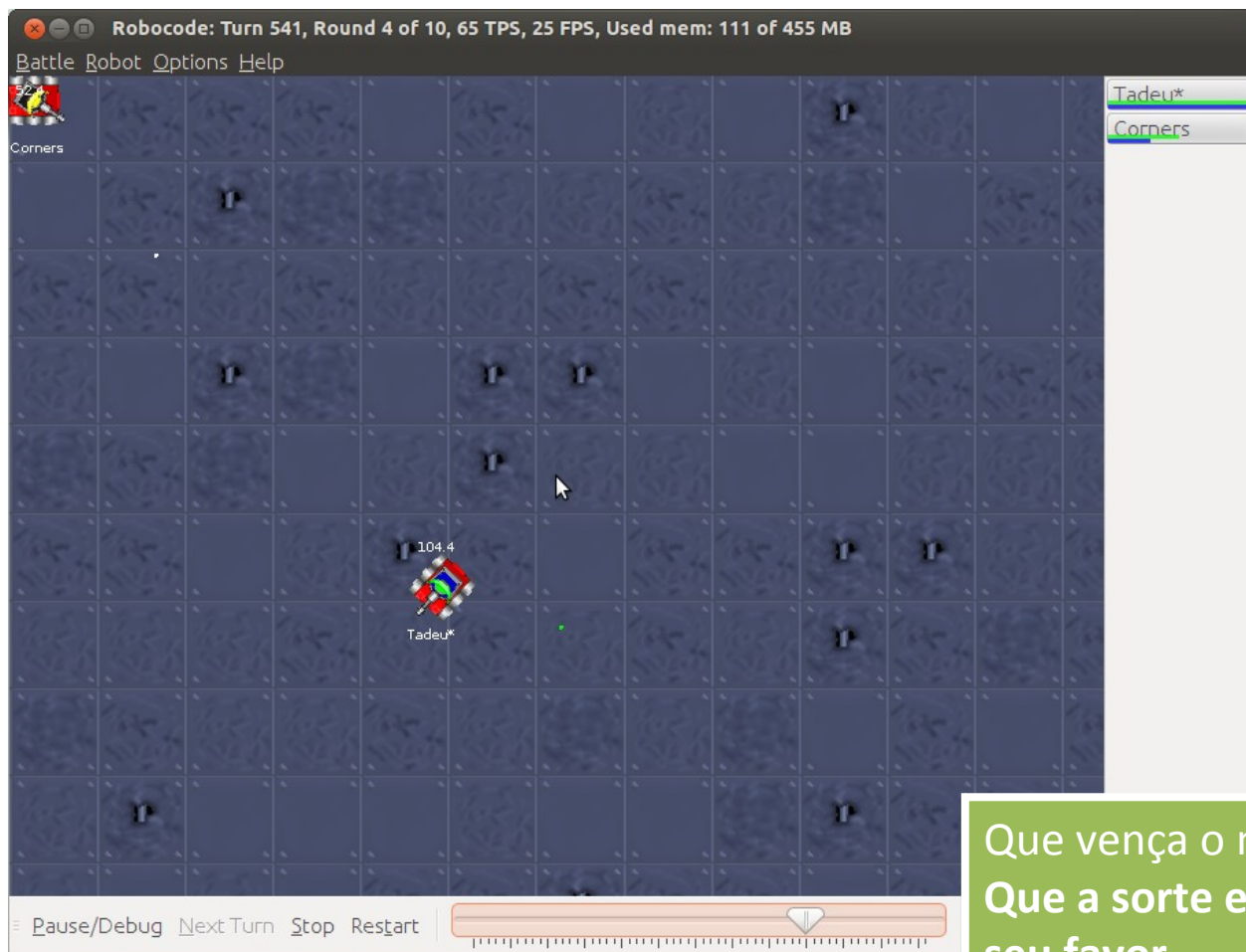




Adicione o robô Corners do pacote sample



Clique em Rules e no campo  
“Number of Rounds”  
coloque 3  
Clique em Start Battle



Que vença o melhor  
Que a sorte esteja sempre a  
seu favor