

A close-up photograph of a person's face, focusing on their eyes and the reflection in their glasses. The person is wearing dark-rimmed glasses and looking directly at a computer monitor. The monitor displays a dark interface with several lines of white text, which appear to be code or terminal output. The background is blurred, showing more of the computer setup and possibly some office equipment.

Java

Introdução

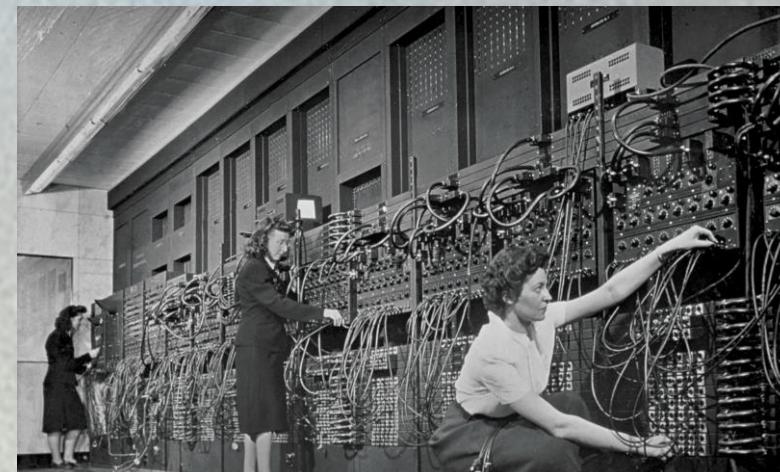
Objetivo

- Conceitos iniciais da linguagem de programação Java;
- Aprendendo a IDE;
- Primeiros comandos;
- Primeiros programas;



Histórico

- ENIAC (1940s): primeiro computador – 30 toneladas, 20.000 válvulas, 6.000 interruptores manuais – sem linguagem de programação;
- Desktop – 1960s – Pascal foi uma das primeiras linguagens de programação.



```
Program PASCAL;  
var  
  msg: String;  
begin  
  msg := "olá mundo!";  
  write(msg);  
end
```

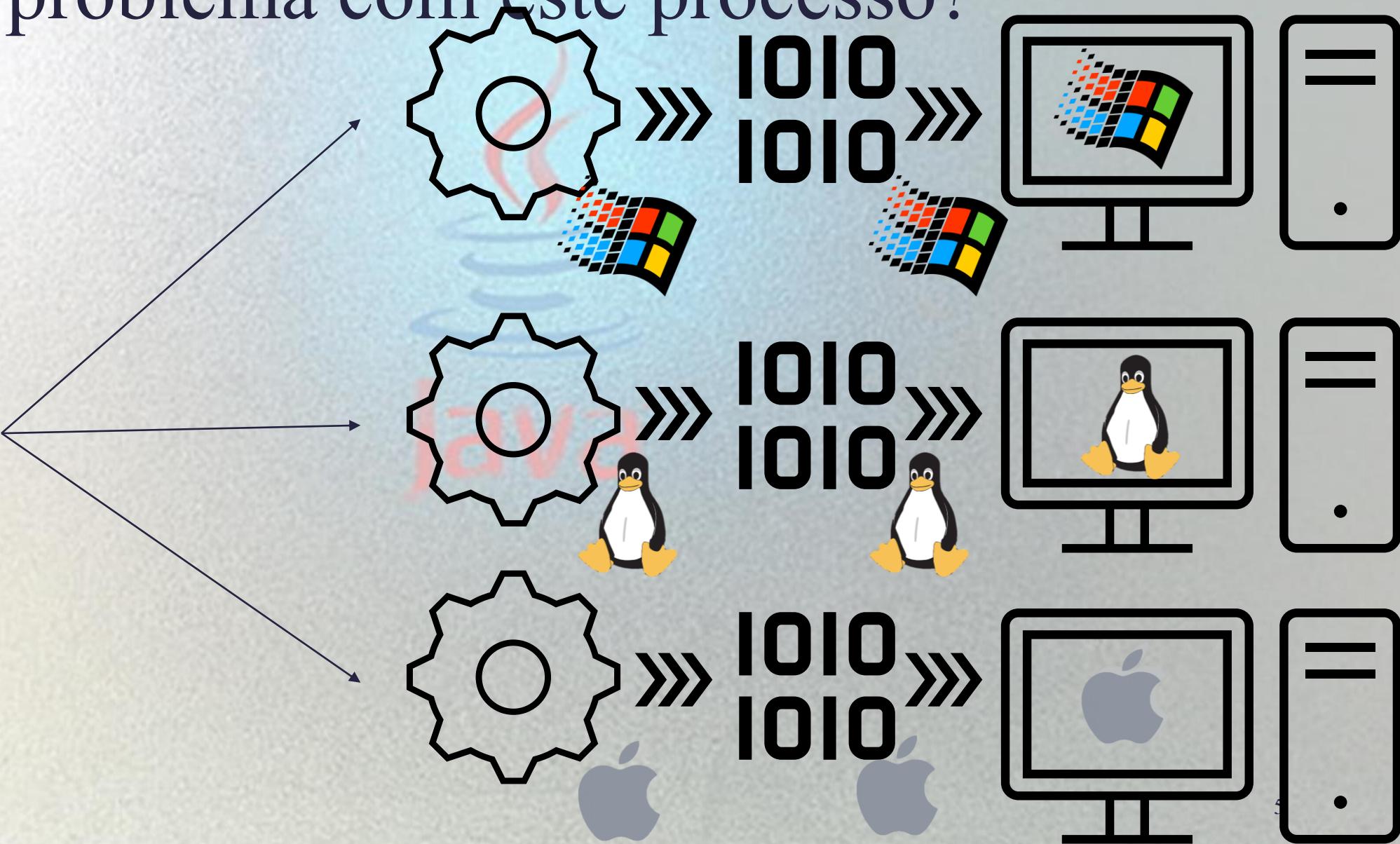
Como funciona?



Qual o problema com este processo?

C++

```
#include <stdio.h>
int main()
{
    printf("Olá,
mundo!\n");
    return 0;
}
```



Solução pensada por James Gosling

- Projeto para fazer um único código-fonte funcionar em todas as plataformas
- Empresa Sun Microsystems:
- Produtora de Servidores;
- Decide que era hora de criar uma forma de universalizar o código-fonte (1992);
- Star Seven (*7)  Controlador Universal



Como ficou a solução

Java

```
public class Aula_01 {  
    public static void main(String[] args){  
        System.out.println("Olá Mundo");  
    }  
}
```



MVJ

Máquina Virtual Java

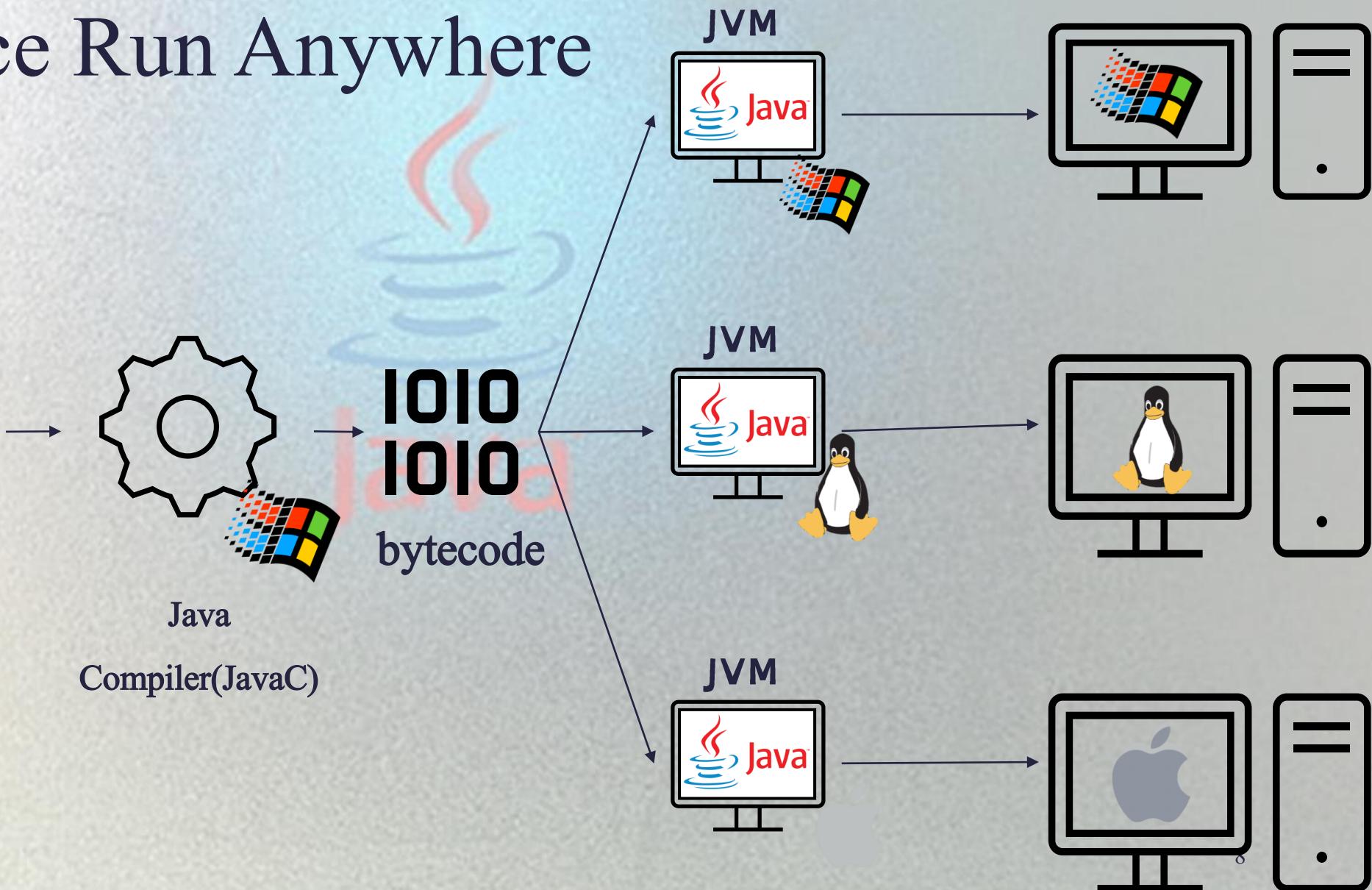


WORA....

Write Once Run Anywhere

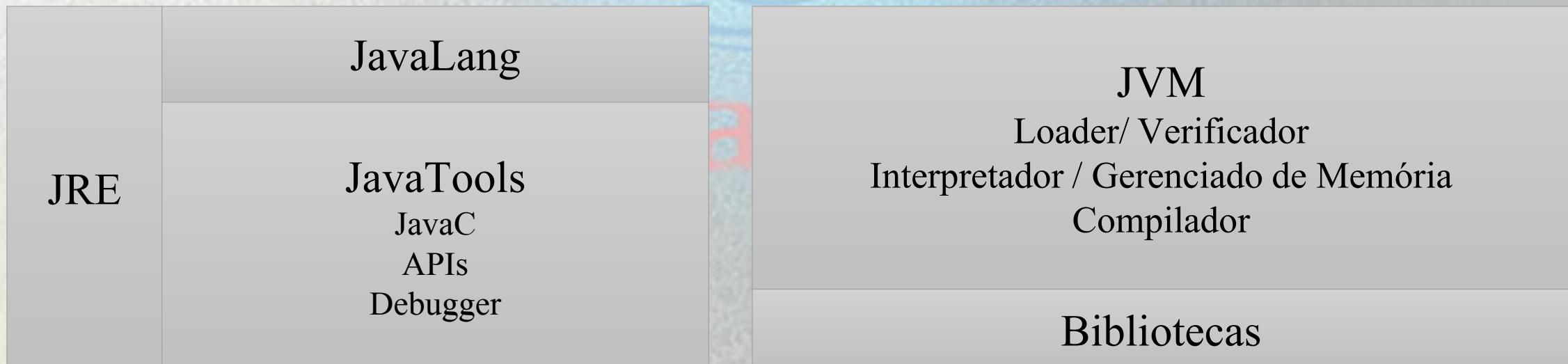
Java

```
public class Aula_01 {  
    public static void main(String[] args){  
        System.out.println("Olá Mundo");  
    }  
}
```



Tipos de Java

- Java Development Kit (JDK)
- Desenvolvedores
- Java Runtime Environment (JRE)
- Usuários



Versões de JDK

- Standard Edition (SE):
 - Aplicação com janelas, controles padrões..
- Enterprise Edition (EE):
 - Acesso remoto, grandes bancos de dados...
- Micro Edition (ME):
 - Controle de dispositivos portáteis, Mobile Apps...



O que precisamos para programar em Java

- Instalar o Java JDK
- IDE – Integrated Development Environment
 - Interface de desenvolvimento:



Vamos começar baixando o Java JDK.

The screenshot shows the official Oracle website. At the top, there's a dark navigation bar with the "ORACLE" logo on the left, a search icon, and links for "Exibir Contas" and "Entre em contato com o departamento de vendas". Below the navigation, a large banner features two men: Satya Nadella on the left and Larry Ellison on the right, both smiling. To the left of the banner is a left arrow icon, and to the right is a right arrow icon. The banner has a wavy, light-colored background. To the right of the banner, there's a white callout box containing text about the Oracle Database Service for Microsoft Azure, a bio for Larry Ellison and Satya Nadella, and a "Explore o Oracle Database Service para Microsoft Azure" button. At the bottom of the page, there are "Oracle Cloud" links and a red speech bubble icon.

Produtos

Partners Recursos Clientes Parceiros Desenvolvedores Eventos

Exibir Contas

Entre em contato com o departamento de vendas

Oracle Database Service para Microsoft Azure

Larry Ellison e Satya Nadella lançaram o Oracle Database for Microsoft Azure, trazendo o desempenho, a disponibilidade e a automatização de nível empresarial do Oracle Database para os clientes do Azure.

Explore o Oracle Database Service para Microsoft Azure

Oracle Cloud

Oracle Cloud

Vamos começar baixando o Java JDK.

The screenshot shows the Oracle Cloud Infrastructure homepage. At the top, there's a dark header with the Oracle logo, a search icon, and account-related links ("Exibir Contas" and "Entre em contato com o departamento de vendas"). Below the header, a main menu includes "Produtos", "Setores", "Recursos", "Clientes", "Parceiros", "Desenvolvedores", and "Eventos". The main content area is divided into two sections: "Oracle Cloud Infrastructure" and "Oracle Cloud Applications".

Oracle Cloud Infrastructure

Visão geral da OCI	Computação	DevOps	OCI Parceria com Microsoft Azure
IA e Machine Learning	Contêineres e Funções	Nuvem do Setor Governamental	Segurança
Análises e BI	Cost Management and Governance	Nuvem Híbrida	Armazenamento
Big Data	Data Lakehouse	Integração	VMware
Regiões de Nuvem	Serviços de Banco de Dados	Rede	
Conformidade	Serviços de Desenvolvedor	Observabilidade e Gerenciamento	

Oracle Cloud Applications

Enterprise Resource Planning (ERP)	Supply Chain & Manufacturing (SCM)	Customer Experience (CX)	Human Capital Management (HCM)
- Financial Management	- Supply Chain Planning	- Advertising	- Human Resources
- Procurement	- Inventory Management	- Marketing	- Talent Management
- Project Management	- Manufacturing	- Sales	- Mais aplicações do HCM
- Risk Management and Compliance	- Maintenance	- Service	Todas as aplicações em nuvem
- Enterprise Performance Management	- Mais aplicações do SCM	Content Management	NetSuite

At the bottom, there are footer links for "Converse com um Especialista" and "Entre em contato ou ligue", along with a "Oracle Cloud" logo.

Vamos começar baixando o Java JDK.

The screenshot shows the Oracle website homepage with a dark background. At the top, there's a navigation bar with the Oracle logo, a search icon, and links for "Exibir Contas" (Show Accounts) and "Entre em contato com o departamento de vendas" (Contact the sales department). Below the navigation bar, there's a horizontal menu with categories: "Produtos", "Setores", "Recursos", "Clientes", "Parceiros", "Desenvolvedores", and "Eventos". Under "Produtos", there are three main sections: "Regiões de Nuvem" (Cloud Regions), "Serviços de Banco de Dados" (Database Services), and "Reute" (Oracle Database). Under "Regiões de Nuvem", there are links for "Conformidade" (Compliance), "Serviços de Desenvolvedor" (Developer Services), and "Observabilidade e Gerenciamento" (Observability and Management). A large "X" button is located at the end of this section. Below this, there's a section titled "Oracle Cloud Applications" with four columns of services: Enterprise Resource Planning (ERP), Supply Chain & Manufacturing (SCM), Customer Experience (CX), and Human Capital Management (HCM); Financial Management, Procurement, Project Management, Risk Management and Compliance, and Enterprise Performance Management under ERP; Supply Chain Planning, Inventory Management, Manufacturing, Maintenance, and More SCM applications under SCM; Advertising, Marketing, Sales, Service, and Content Management under CX; and Human Resources, Talent Management, and NetSuite under HCM. At the bottom, there's a section titled "Hardware e Software" (Hardware and Software) with links for Java, MySQL, Linux, Aplicações On-Premises, Todos os Softwares, Servidores e Armazenamento, and Exadata. A green banner at the bottom left says "Oracle Cloud". At the bottom right, there are buttons for "Converse com um Especialista" (Talk to a specialist) and "Entre em contato ou ligue" (Contact or call), along with an "X" button.

Vamos começar baixando o Java JDK.

The screenshot shows the Oracle Java website. At the top, there's a dark header with the "ORACLE" logo, a search icon, and buttons for "Exibir Contas" and "Entre em contato com o departamento de vendas". Below the header, a navigation menu includes links for "Produtos", "Setores", "Recursos", "Clientes", "Parceiros", "Desenvolvedores", and "Eventos". A breadcrumb trail "Oracle Brasil > Oracle Java" is visible. The main content area features a large image of three people interacting with floating spheres, symbolizing connectivity or data. A call-to-action button "Faça o download do Java" is prominently displayed. On the left, there's a sidebar with a "Webcast sob demanda" section and a "Java Management Service" section. The right side has a "Java para metas de segurança e conformidade de TI" section. A central text block discusses Java's role as a development platform.

ORACLE

Produtos Setores Recursos Clientes Parceiros Desenvolvedores Eventos

Oracle Brasil >

Oracle Java

O Java é a principal linguagem de programação e plataforma de desenvolvimento. Reduz custos e prazos de desenvolvimento, impulsiona a inovação e aprimora os serviços de aplicativos. Com milhões de desenvolvedores executando mais de 51 bilhões de Java Virtual Machines em todo o mundo, o Java continua sendo a plataforma de desenvolvimento preferida de empresas e desenvolvedores.

Avalie a integridade do ambiente Java

Faça o download do Java

Webcast sob demanda: VDC Research sobre sucesso e segurança de longo prazo com Java

O Java continua sendo a principal plataforma de desenvolvimento para organizações que buscam atender às necessidades de negócios atuais. Assista a este webcast sob demanda para saber mais sobre como as equipes estão reconhecendo o Java como a melhor opção de segurança e para atender às suas necessidades de desenvolvimento na

Java Management Service

Descubra, monitore e gerencie o ambiente Java com este novo e avançado serviço da Oracle Cloud.

Java para metas de segurança e conformidade de TI

Especialistas da 451 Research fornecem insights sobre conformidade regulatória em projetos de TI e como o Oracle Java ajuda as empresas a aumentar a segurança e a estabilidade.

Vamos começar baixando o Java JDK.

The screenshot shows the Oracle Java Downloads page. At the top, there's a navigation bar with links for Products, Industries, Resources, Customers, Partners, Developers, and Events. On the right side of the bar are icons for View Accounts and Contact Sales, along with a search icon. Below the navigation bar, the page title is "Java Downloads". To the right of the title is the classic Java steaming coffee cup logo. A secondary navigation bar below the main one includes links for Java downloads, Tools and resources, and Java archive. The "Java downloads" link is underlined. In the center of the page, there's a section titled "Looking for other Java downloads?" with icons for Java 8, Java 11, Java 17, Java 18, Java 19, Java 20, Java 21, and Java 22. Below this, a callout box says "Java 18 and Java 17 available now". It explains that Java 17 LTS is the latest long-term support release for the Java SE platform, and that JDK 18 and JDK 17 binaries are free to use in production and free to redistribute, at no cost, under the [Oracle No-Fee Terms and Conditions](#). It also mentions that JDK 18 will receive updates until September 2022 and that JDK 17 will receive updates until at least September 2024. There are buttons for "Learn about Java SE Subscription" and "OpenJDK Early Access Builds" and "JRE for Consumers". At the bottom, there are links for "Java 18" and "Java 17", and a section for "Java SE Development Kit 18.0.2 downloads".

Java 18 and Java 17 available now

Java 17 LTS is the latest long-term support release for the Java SE platform. JDK 18 and JDK 17 binaries are free to use in production and free to redistribute, at no cost, under the [Oracle No-Fee Terms and Conditions](#).

[Learn about Java SE Subscription](#)

JDK 18 will receive updates under these terms, until September 2022 when it will be superseded by JDK 19

JDK 17 will receive updates under these terms, until at least September 2024.

[Java 18](#) [Java 17](#)

Java SE Development Kit 18.0.2 downloads

Vamos começar baixando o Java JDK.

Java downloads Tools and resources Java archive

Java 18 and Java 17 available now

Java 17 LTS is the latest long-term support release for the Java SE platform. JDK 18 and JDK 17 binaries are free to use in production and free to redistribute, at no cost, under the [Oracle No-Fee Terms and Conditions](#).

[Learn about Java SE Subscription](#)

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JDK 17 will receive updates under these terms, until at least September 2024.

[Java 18](#) [Java 17](#)

Java SE Development Kit 18.0.2 downloads

Thank you for downloading this release of the Java™ Platform, Standard Edition Development Kit (JDK™). The JDK is a development environment for building applications and components using the Java programming language.

The JDK includes tools for developing and testing programs written in the Java programming language and running on the Java platform.

[Linux](#) [macOS](#) **Windows**

Product/file description	File size	Download
Arm 64 Compressed Archive	172.71 MB	https://download.oracle.com/java/18/latest/jdk-18_linux-aarch64_bin.tar.gz (sha256)
Arm 64 RPM Package	154.18 MB	https://download.oracle.com/java/18/latest/jdk-18_linux-aarch64_bin.rpm (sha256)
x64 Compressed Archive	173.84 MB	https://download.oracle.com/java/18/latest/jdk-18_linux-x64_bin.tar.gz (sha256)

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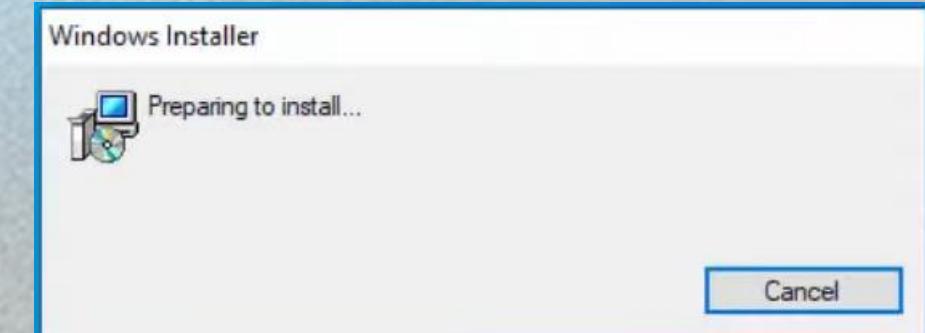
The JDK includes tools for developing and testing programs written in the Java programming language and running on the Java platform.

[Linux](#) [macOS](#) [Windows](#)

Product/file description	File size	Download
x64 Compressed Archive	172.79 MB	https://download.oracle.com/java/18/latest/jdk-18_windows-x64_bin.zip (sha256 ↗)
x64 Installer	153.37 MB	https://download.oracle.com/java/18/latest/jdk-18_windows-x64_bin.exe (sha256 ↗)
x64 MSI Installer	152.25 MB	https://download.oracle.com/java/18/latest/jdk-18_windows-x64_bin.msi (sha256 ↗)

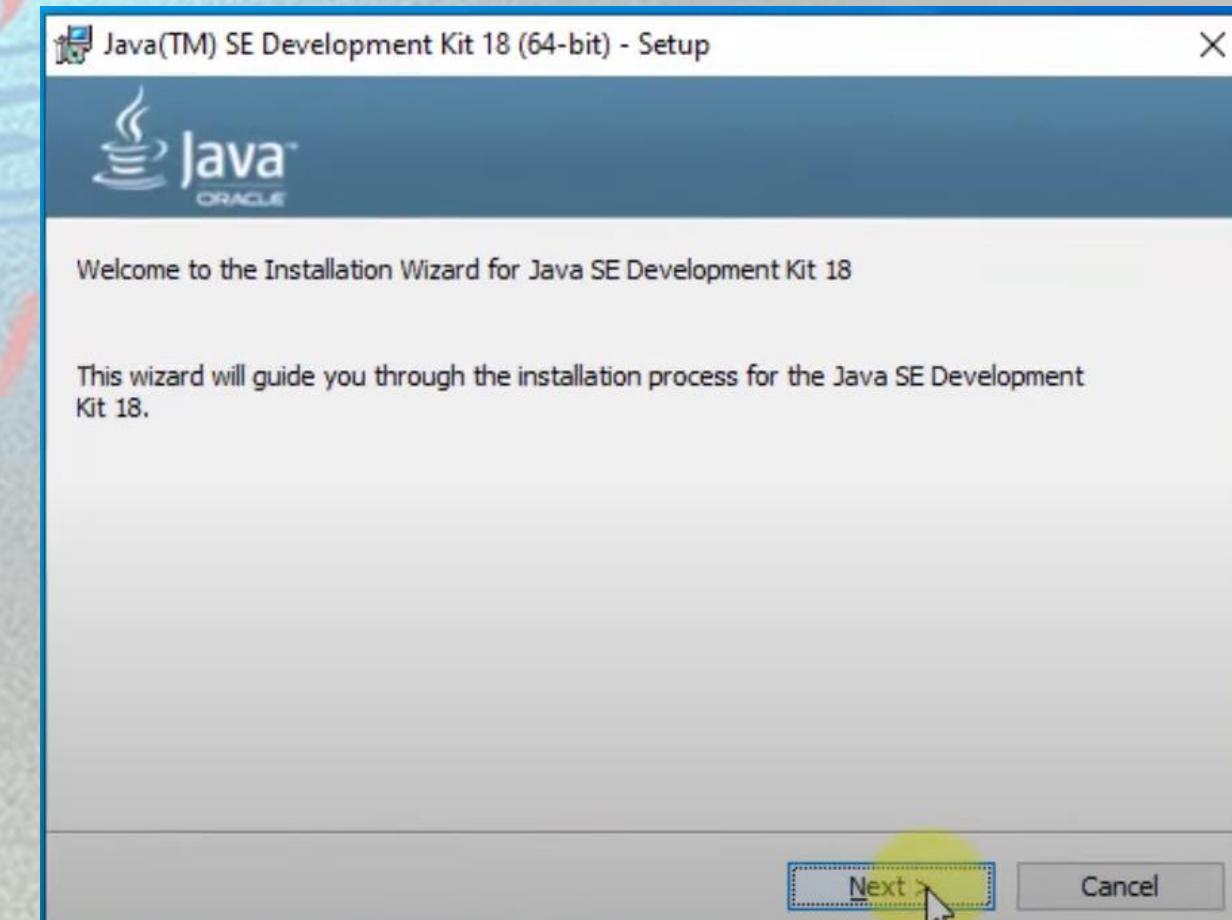
Vamos instalar o Java JDK.

- Abra o instalador e siga...



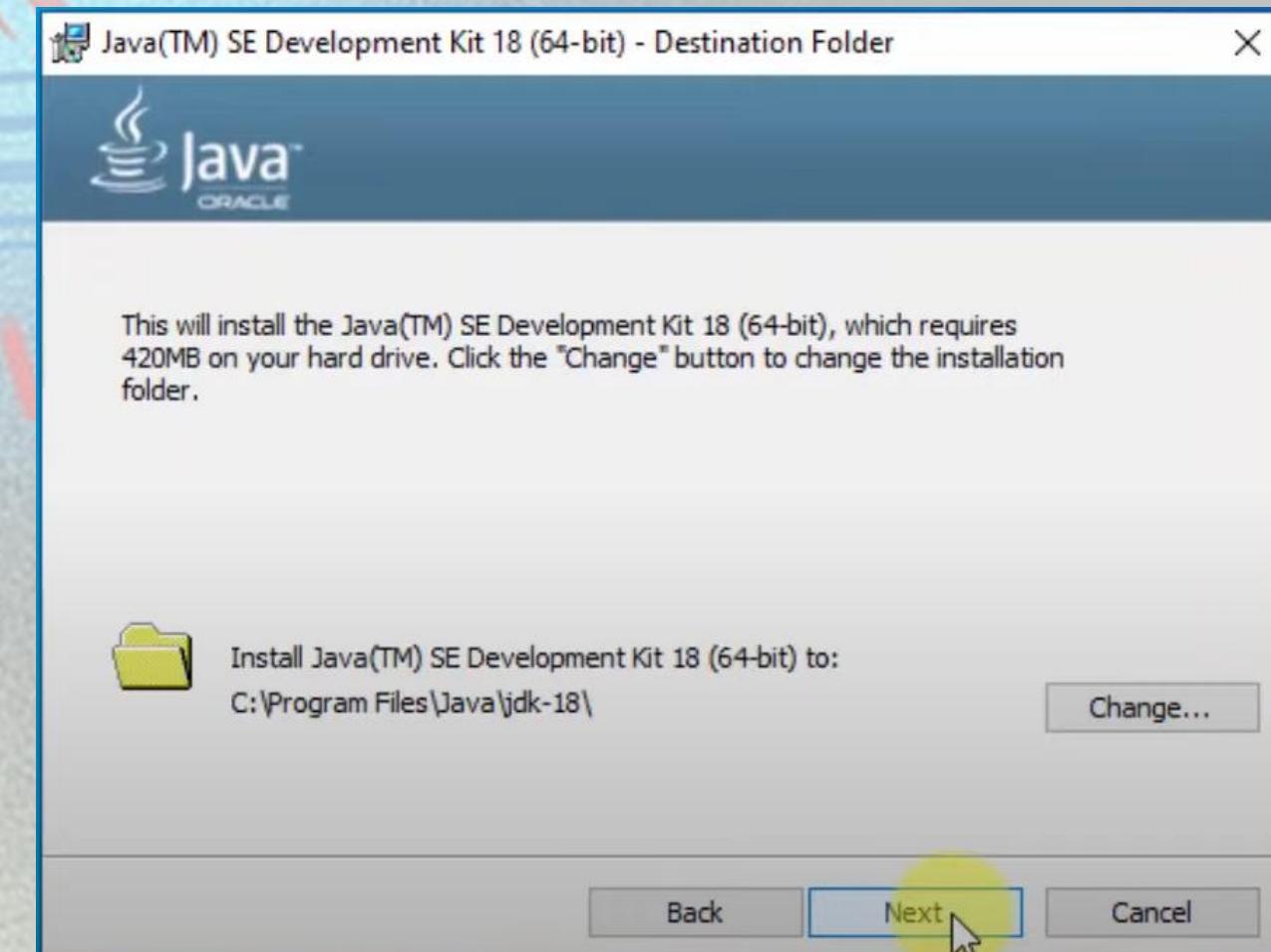
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- Abra o instalador e siga...



Vamos instalar o Java JDK.

- Abra o instalador e siga...



Vamos instalar o Java JDK.

- Abra o instalador e siga...



Vamos instalar o Java JDK.

- WIN+E para abrir Explorer
- Encontre a pasta bin
 - C:\Arquivos de Programas\Java
- Copie o caminho para esta pasta

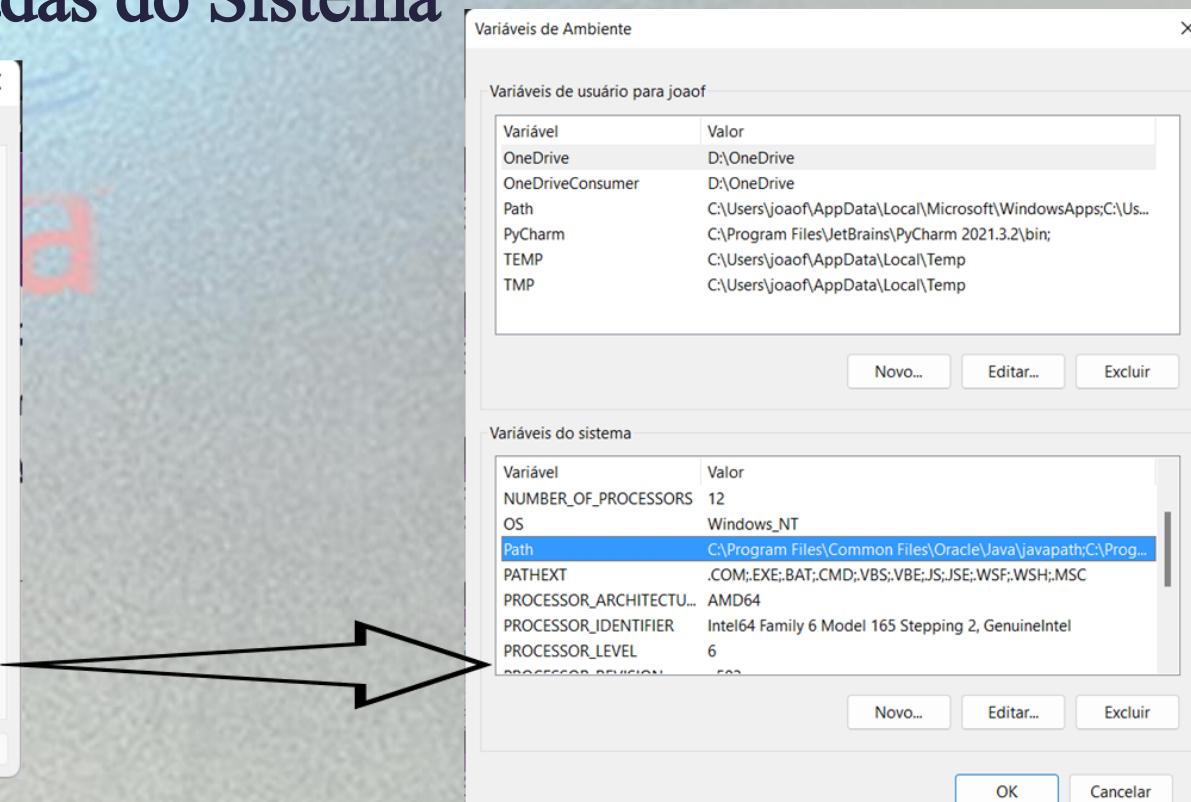
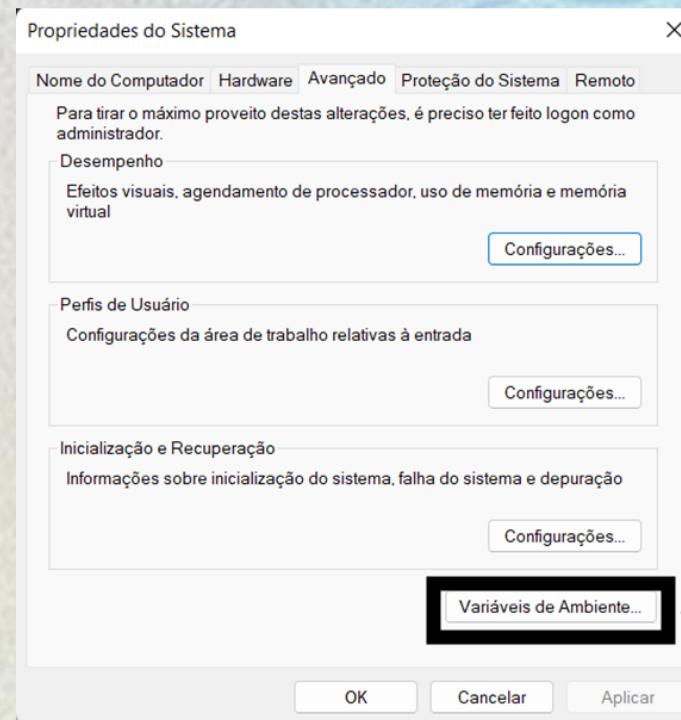


Este Computador > Windows-SSD (C:) > Arquivos de Programas > Java > jdk-18.0.2 > bin			
Nome	Data de modificação	Tipo	Tamanho
server	06/08/2022 08:46	Pasta de arquivos	
api-ms-win-core-console-l1-1-0.dll	06/08/2022 08:46	Extensão de aplic...	12 KB
api-ms-win-core-console-l1-2-0.dll	06/08/2022 08:46	Extensão de aplic...	12 KB
api-ms-win-core-datetime-l1-1-0.dll	06/08/2022 08:46	Extensão de aplic...	12 KB

Vamos instalar o Java JDK.

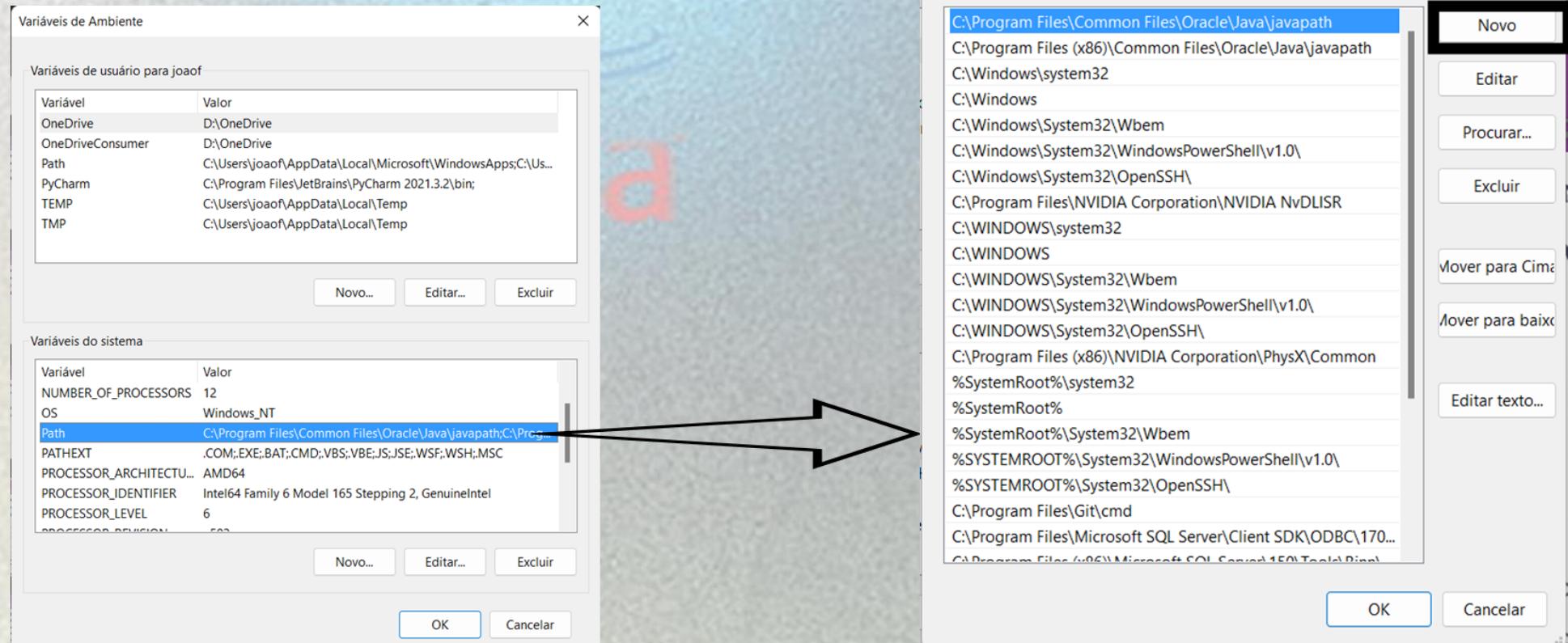
- Vamos vincular o JDK ao ambiente Windows.

- Abra a janela “Configurações Avançadas do Sistema”



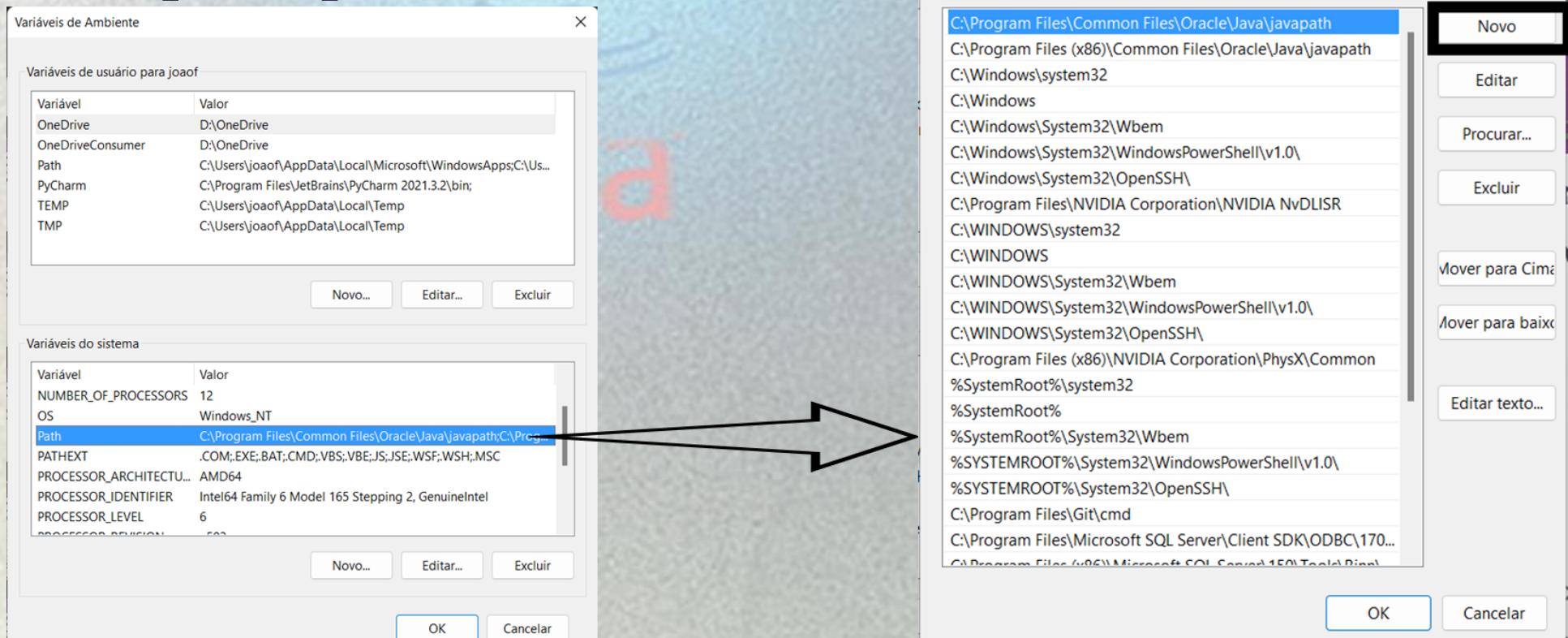
Vamos instalar o Java JDK.

- Vamos vincular o JDK ao ambiente Windows.
 - 2 cliques em Path -> Novo



Vamos instalar o Java JDK.

- Vamos vincular o JDK ao ambiente Windows.
 - Cola o caminho para a pasta bin



Vamos instalar o Java JDK.

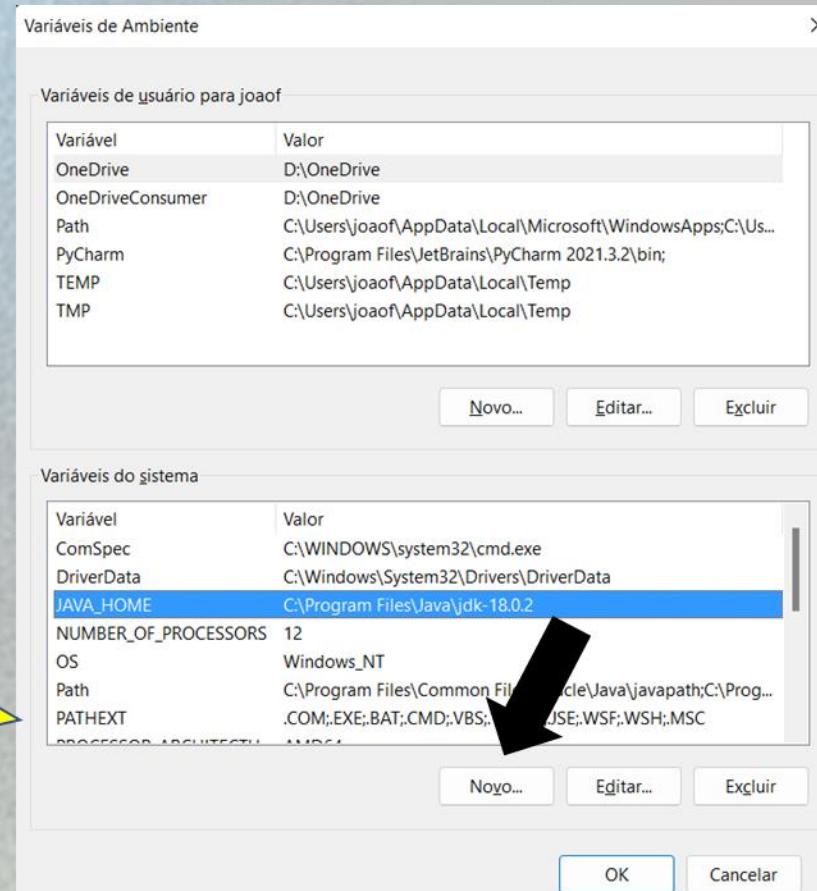
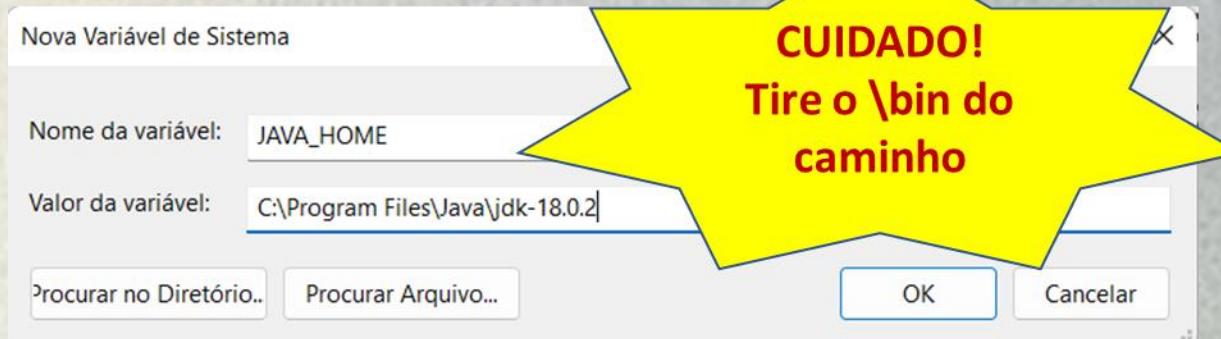
- Vamos vincular o JDK ao ambiente Windows.

- Voltando a janela anterior:

- Clica em “Novo”

- Nome da Variável: JAVA_HOME

- Valor da Variável: Caminho

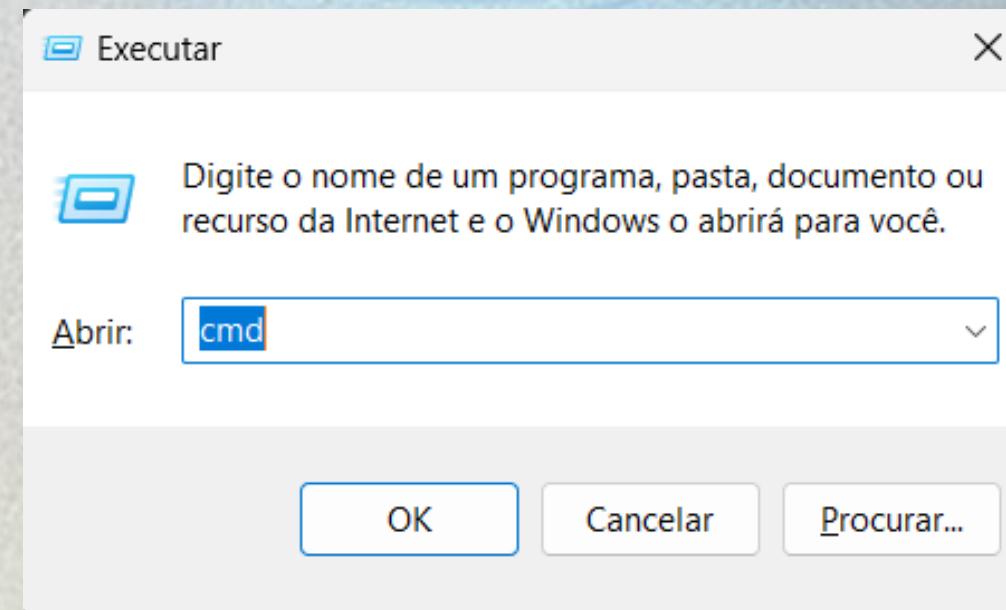


Verificando se o Java foi instalado

- Verificando se deu tudo certo até o momento:
 - Abrir o “Prompt de Comando” ou “Terminal do Windows”

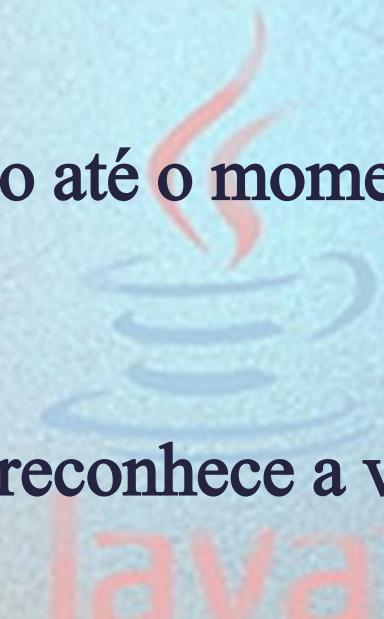
- Win+R

- cmd



Verificando se o Java foi instalado

- Verificando se deu tudo certo até o momento:
 - No Prompt de Comando
 - Verifique se o Windows reconhece a versão do Java e do JavaC



```
Microsoft Windows [versão 10.0.22000.856]
(c) Microsoft Corporation. Todos os direitos reservados.

C:\Users\joaoef>java --version
java 18.0.2 2022-07-19
Java(TM) SE Runtime Environment (build 18.0.2+9-61)
Java HotSpot(TM) 64-Bit Server VM (build 18.0.2+9-61, mixed mode, sharing)

C:\Users\joaoef>javac --version
javac 18.0.2
```

Two yellow arrows point to the Java version output lines in the terminal window.

Vamos baixar uma IDE

Apache NetBeans

Community Participate Blog Get Help Plugins Download

Latest release

Apache NetBeans 14

[Download](#)



Apache NetBeans
Fits the Pieces Together

Development Environment, Tooling Platform and Application Framework.

Fast & Smart Editing
Apache NetBeans is much more than a text editor. It highlights source code syntactically and semantically, lets you easily refactor code, with a range of handy and powerful tools.

Java, JavaScript, PHP, HTML5, CSS, and More
Apache NetBeans provides editors, wizards, and templates to help you create applications in Java, PHP and many other languages.

Cross Platform
Apache NetBeans can be installed on all operating systems that support Java, i.e., Windows, Linux, Mac OSX and BSD. Write Once, Run Anywhere, applies to NetBeans too.

<https://netbeans.apache.org>

Vamos baixar uma IDE

 Apache NetBeans

Community Participate Blog Get Help Plugins Download

Downloading Apache NetBeans 14

Apache NetBeans 14 was released on June 9, 2022. [Go here on GitHub](#) for a list of fixed issues for Apache NetBeans 14.

Apache NetBeans 14 is available for download from your closest Apache mirror.

- Binaries: [netbeans-14-bin.zip \(SHA-512, PGP ASC\)](#)
- Installers:
 - [Apache-NetBeans-14-bin-windows-x64.exe \(SHA-512, PGP ASC\)](#)
 - [Apache-NetBeans-14-bin-linux-x64.sh \(SHA-512, PGP ASC\)](#)
 - [Apache-NetBeans-14-bin-macosx.dmg \(SHA-512, PGP ASC\)](#)
- Source: [netbeans-14-source.zip \(SHA-512, PGP ASC\)](#)

Officially, it is important that you [verify the integrity](#) of the downloaded files using the PGP signatures (.asc file) or a hash (.sha512 files). The PGP keys used to sign this release are available [here](#).

Apache NetBeans can also be installed as a self-contained [snap package](#) on Linux.

Community Installers

 Individual NetBeans committers may provide additional binary packages as a convenience. While built using the Apache NetBeans release, they are not releases of the Apache Software Foundation. They may include other contents (eg. JDK) under additional license terms.

- [Codelerity / Gj IT packages](#) - Windows, macOS and Linux (.deb / .AppImage) built with [NBPackager](#). Most include a local JDK runtime for the IDE to run on, for a self-contained out-of-the-box experience (other JDK's may be used for projects).

Vamos baixar uma IDE

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COMMUNITY-LED DEVELOPMENT "THE APACHE WAY"

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We suggest the following site for your download:

<https://dlcdn.apache.org/netbeans/netbeans-installers/14/Apache-NetBeans-14-bin-windows-x64.exe>

Alternate download locations are suggested below.

It is essential that you verify the integrity of the downloaded file using the PGP signature ([.asc](#) file) or a hash ([.md5](#) or [.sha*](#) file).

HTTP

<https://dlcdn.apache.org/netbeans/netbeans-installers/14/Apache-NetBeans-14-bin-windows-x64.exe>

BACKUP SITE

<https://dlcdn.apache.org/netbeans/netbeans-installers/14/Apache-NetBeans-14-bin-windows-x64.exe>

VERIFY THE INTEGRITY OF THE FILES

It is essential that you verify the integrity of the downloaded file using the PGP signature ([.asc](#) file) or a hash ([.md5](#) or [.sha*](#) file). Please read [Verifying Apache Software Foundation Releases](#) for more information on why you should verify our releases.

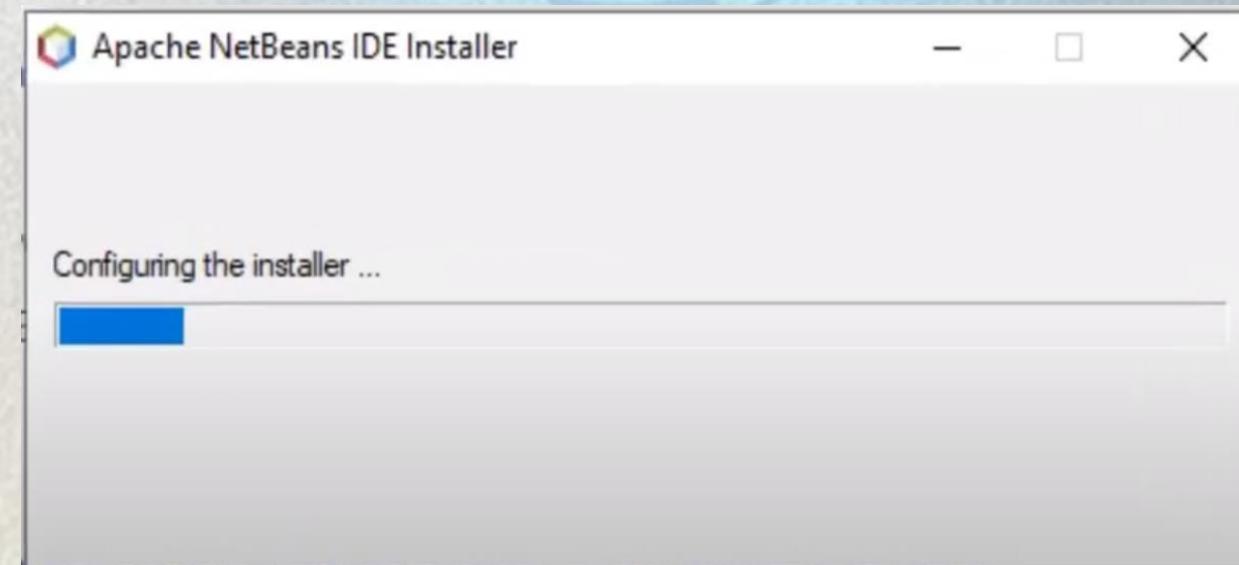
Verify the PGP signature using PGP or GPG. First download the [KEYS](#) as well as the [.asc](#) signature file for the relevant distribution.

```
% gpg --import KEYS
```

<https://dlcdn.apache.org/netbeans/netbeans-installers/14/Apache-NetBeans-14-bin-windows-x64.exe>

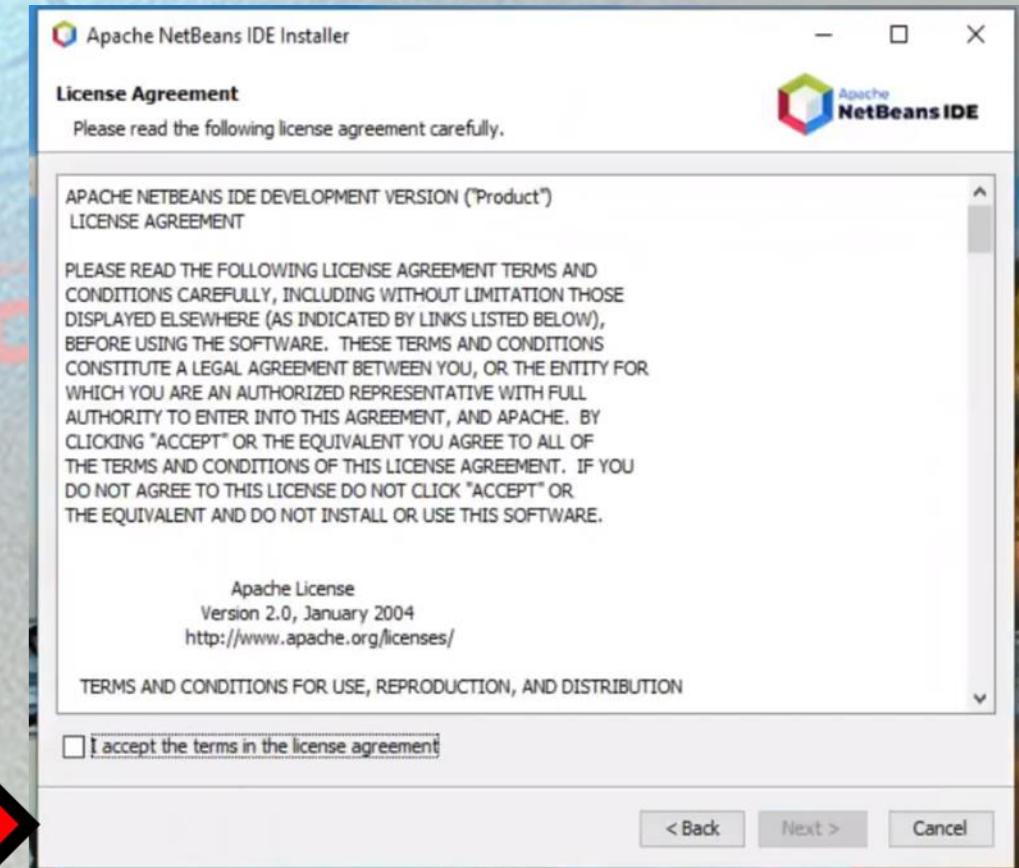
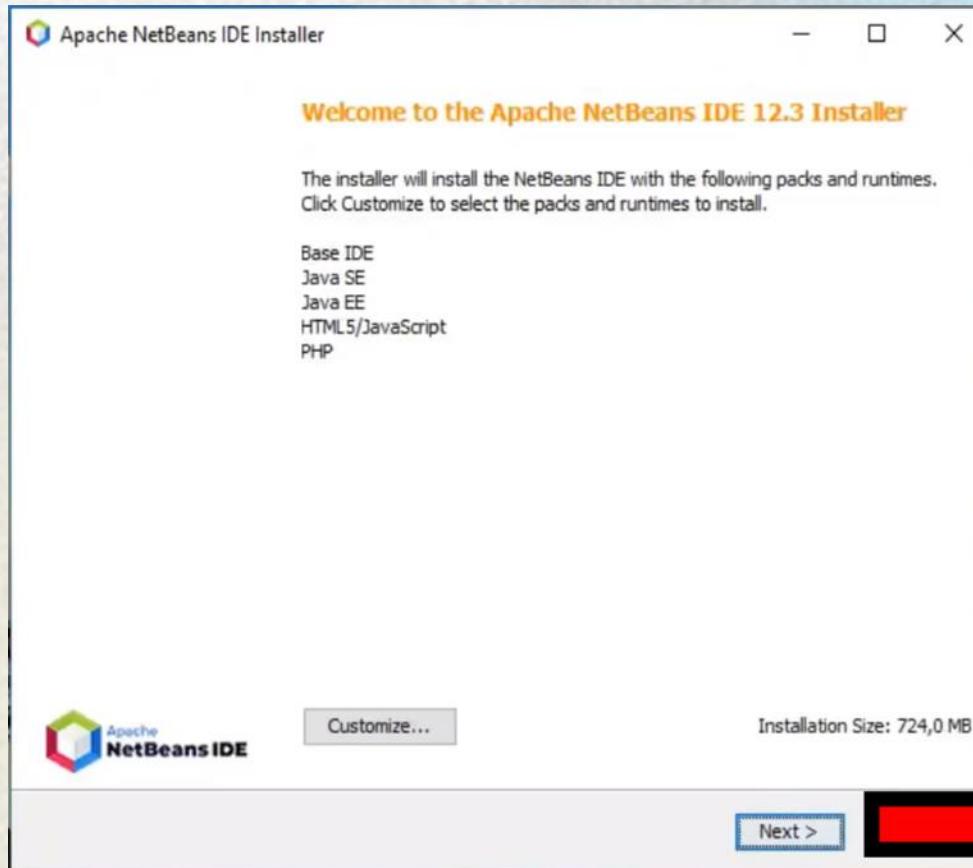
Vamos instalar a IDE baixada

- 2 cliques no executável para inicializar a instalação



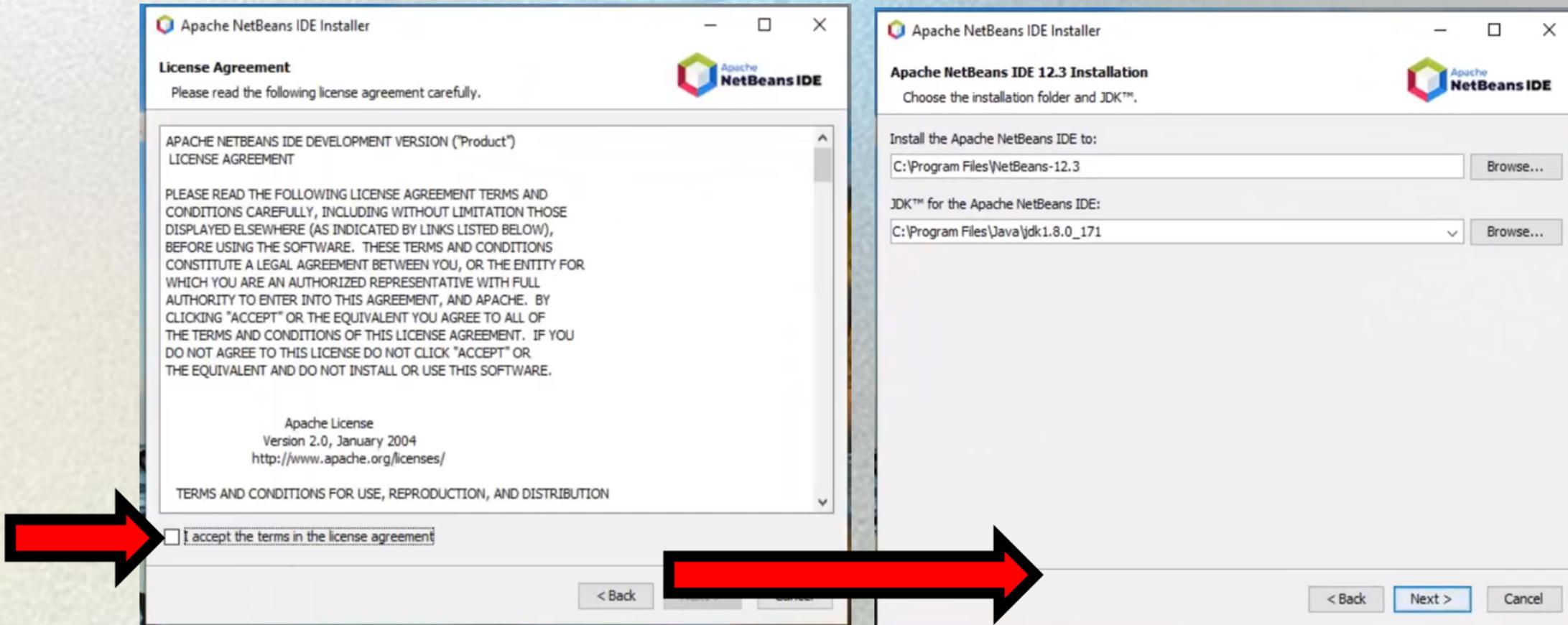
Vamos instalar a IDE baixada

- Clique em Next



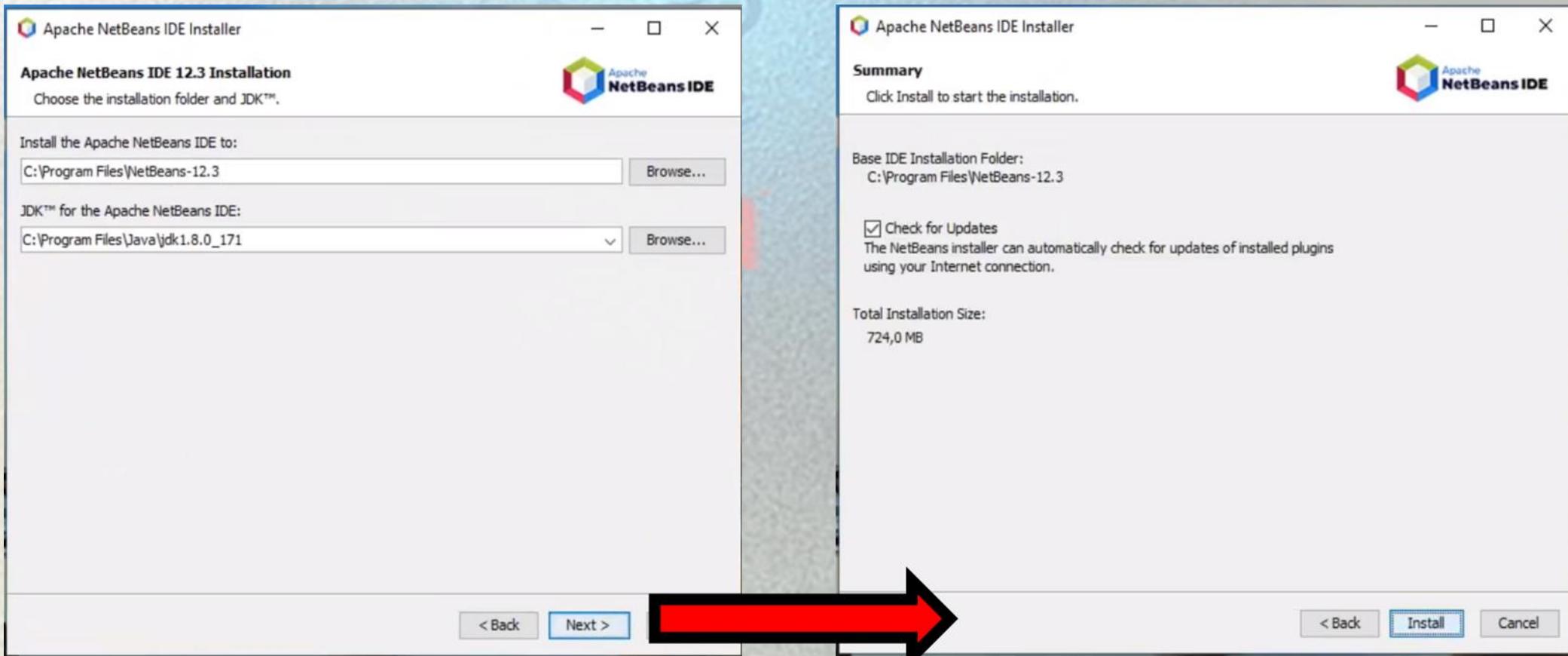
Vamos instalar a IDE baixada

- Clique em Next



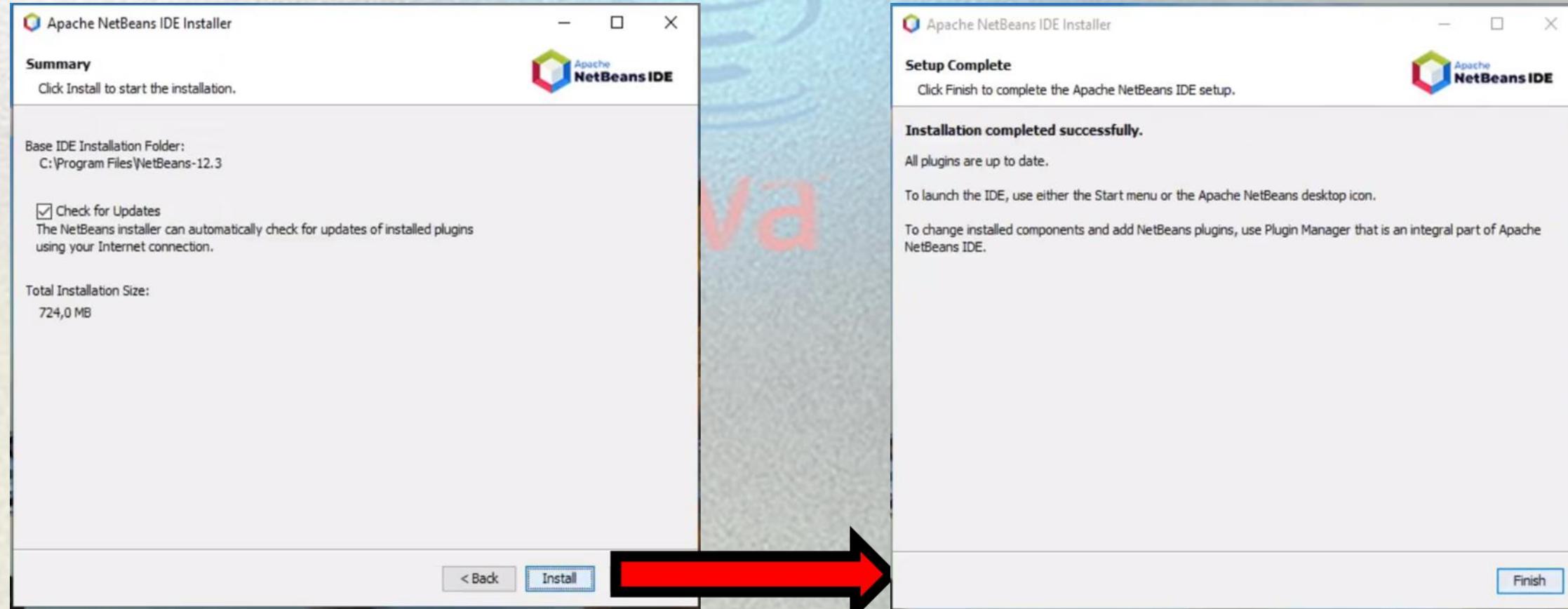
Vamos instalar a IDE baixada

- Clique em Next

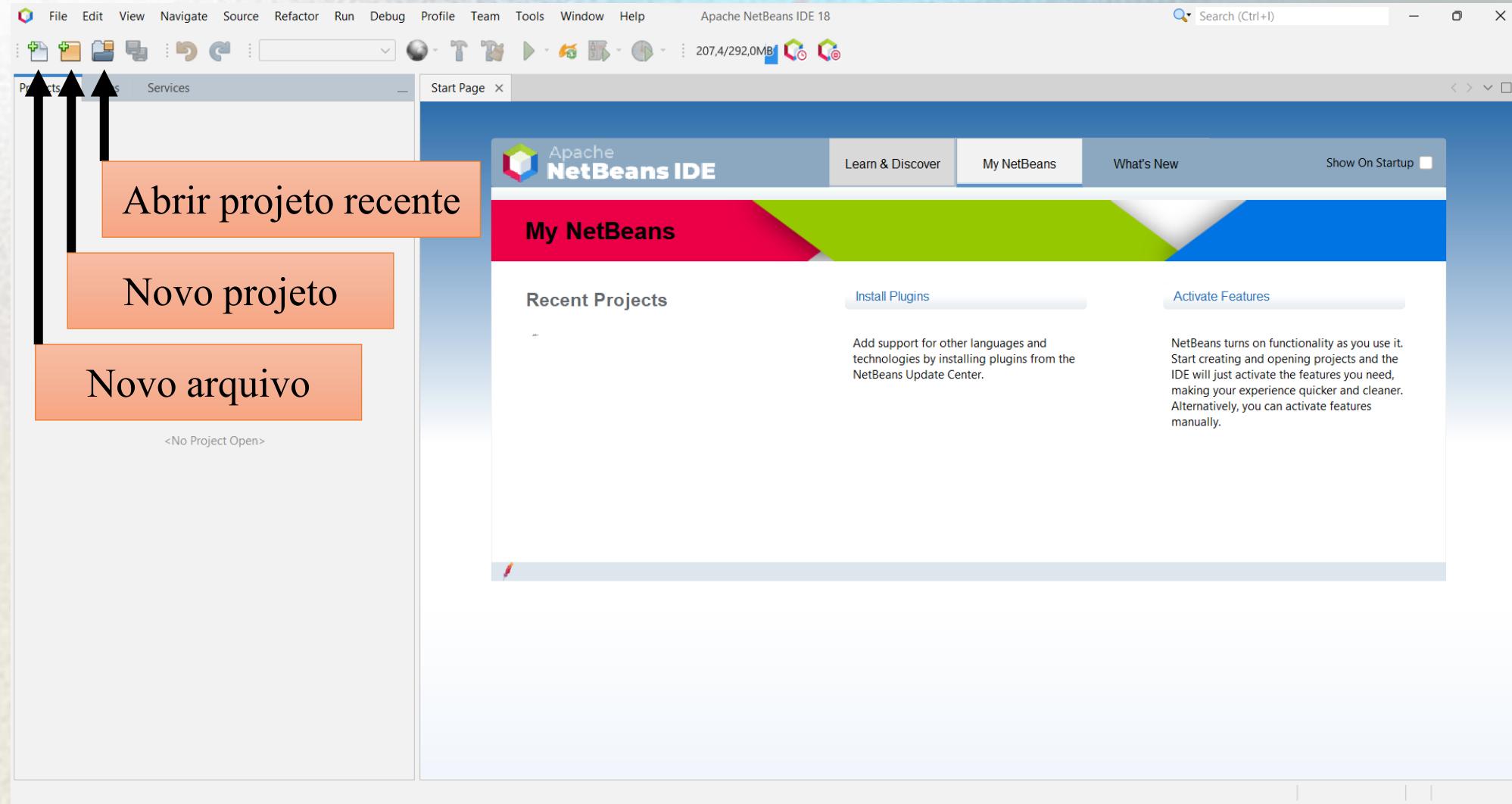


Vamos instalar a IDE baixada

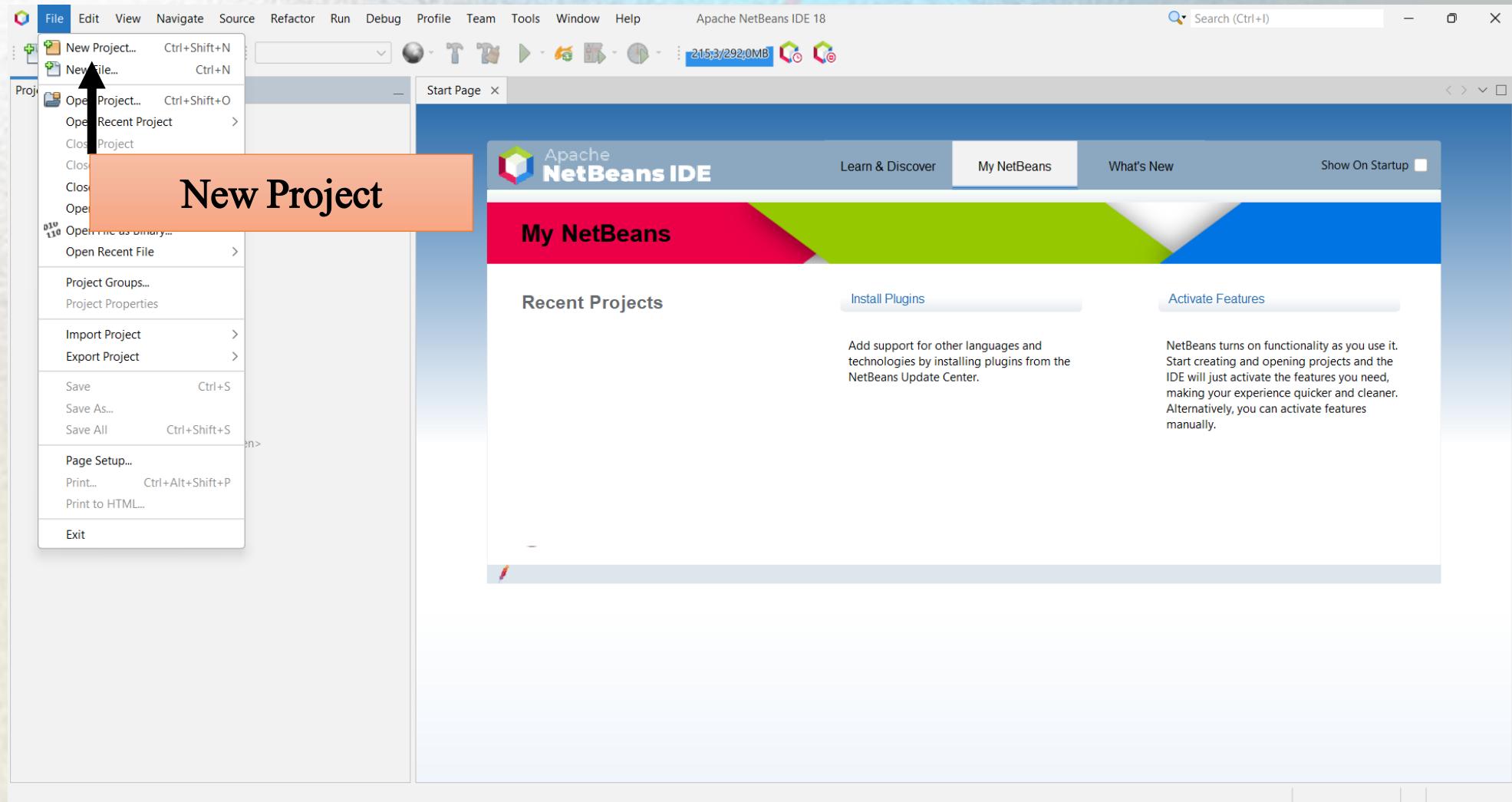
- Clique em Instalar e espere finalizar a instalação



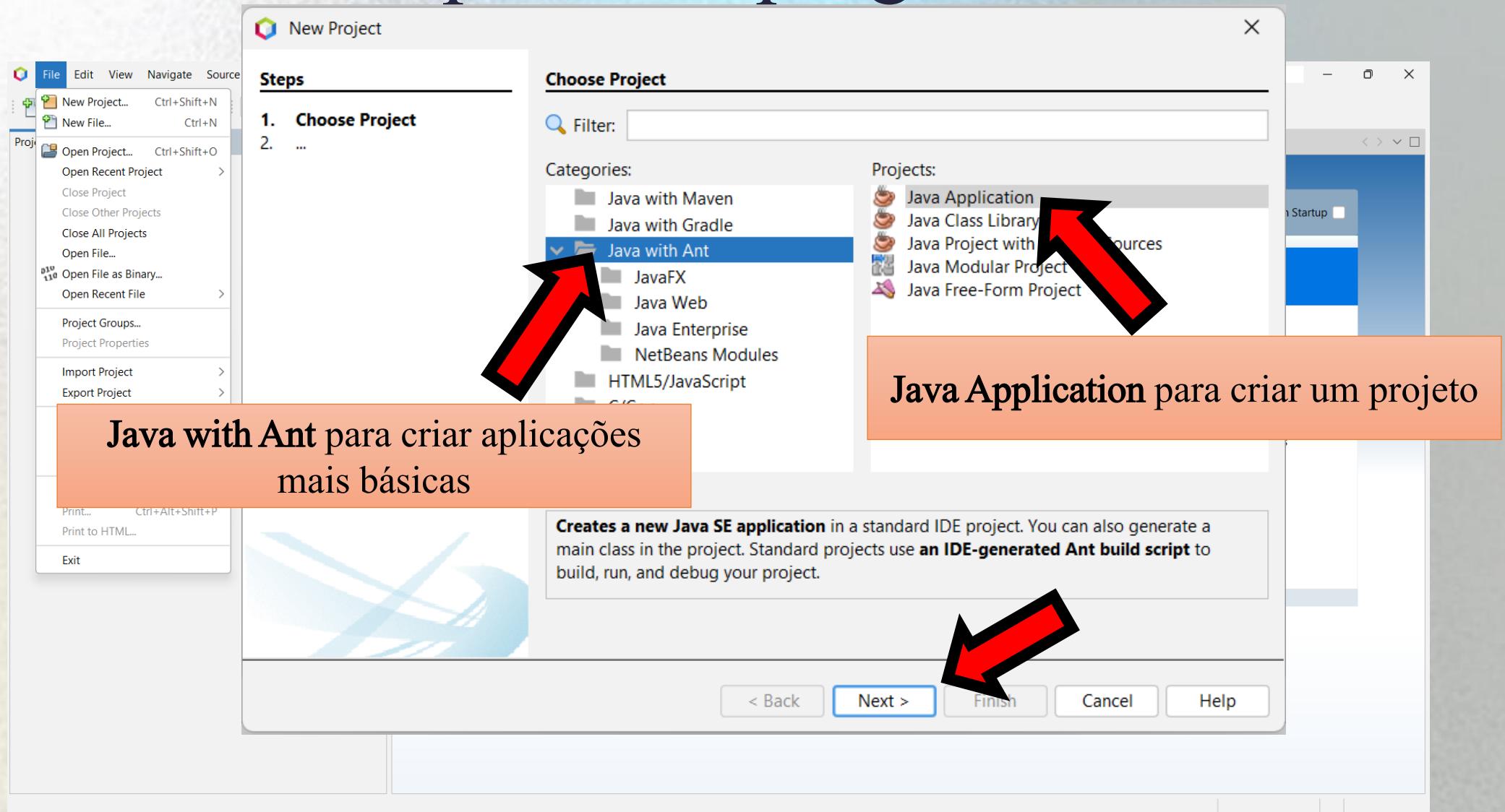
Criando nosso primeiro programa



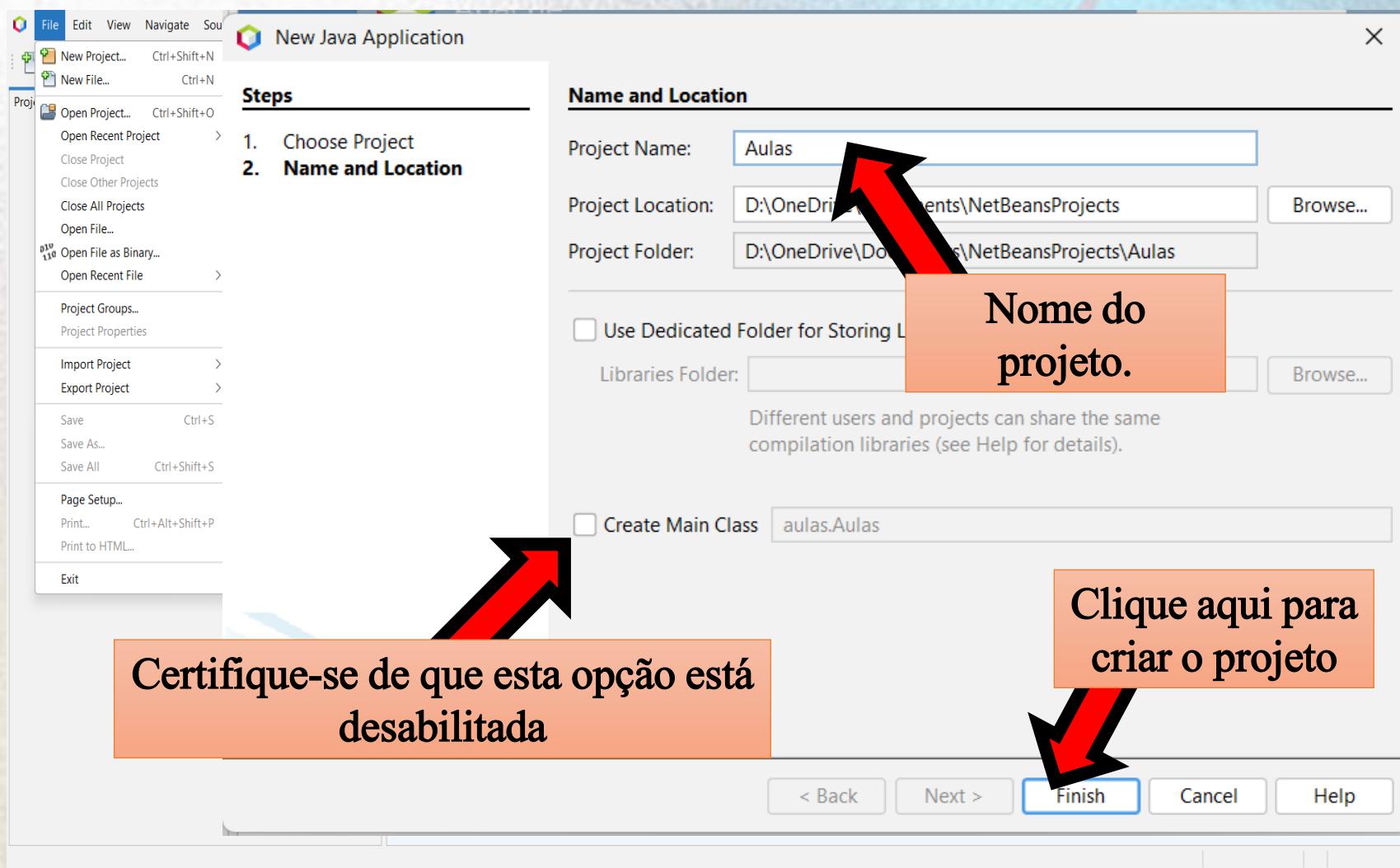
Criando nosso primeiro programa



Criando nosso primeiro programa

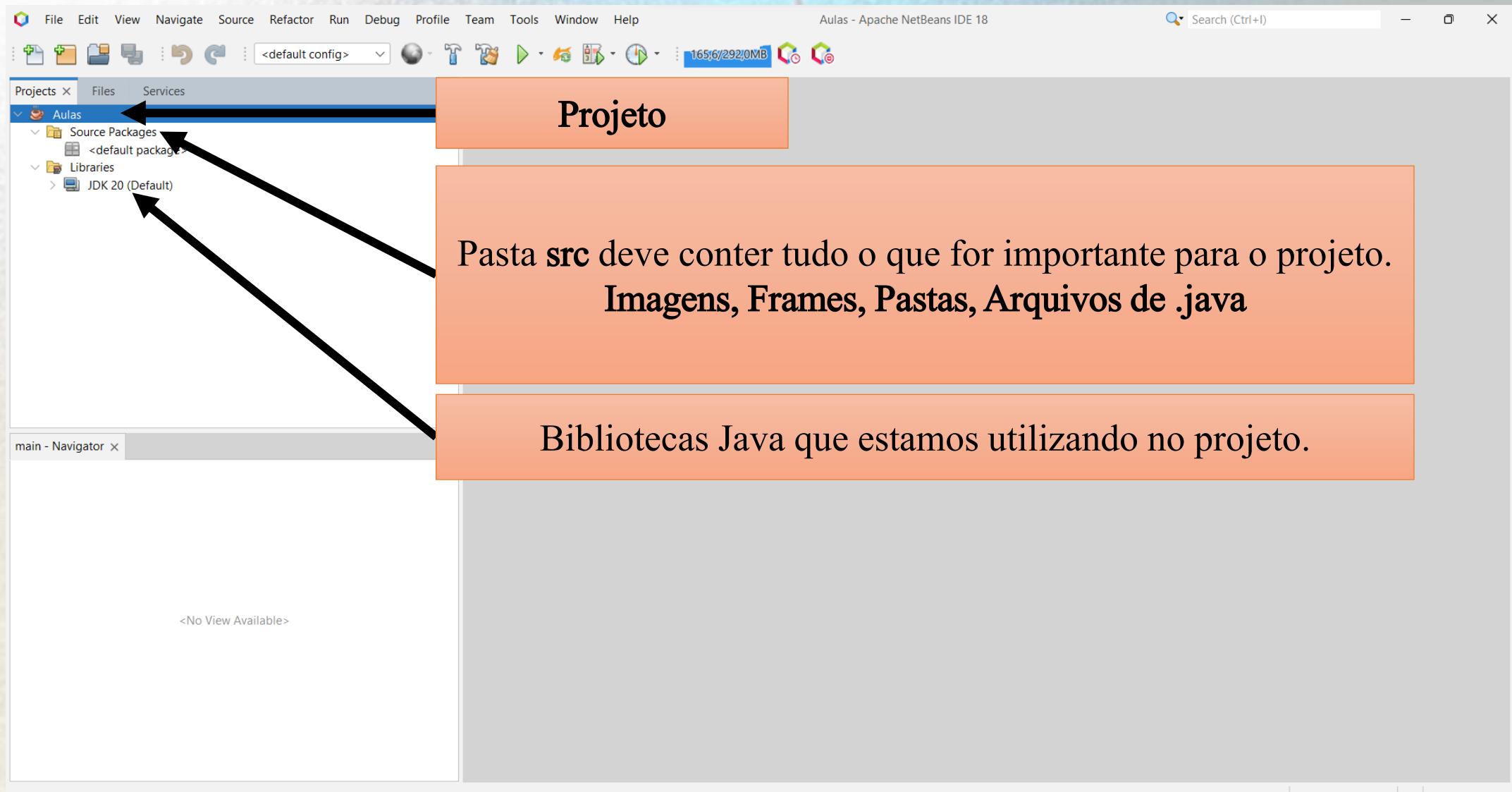


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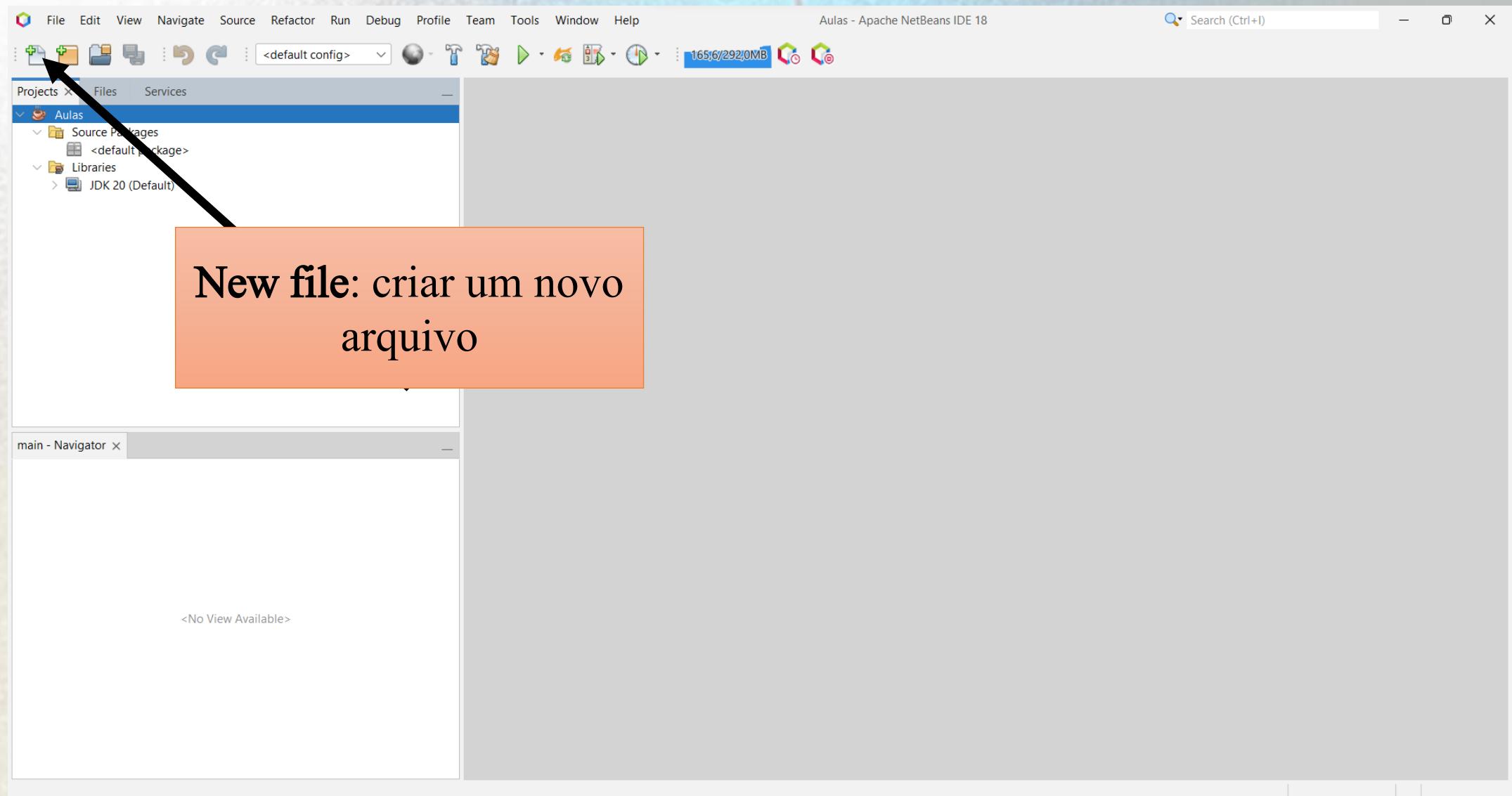


- Nome do projeto:
 - Primeira letra de cada palavra deve ser maiúscula
 - Não usar caracteres especiais ou acentuação
 - Não separar palavras usando espaço.
 - Pode usar números

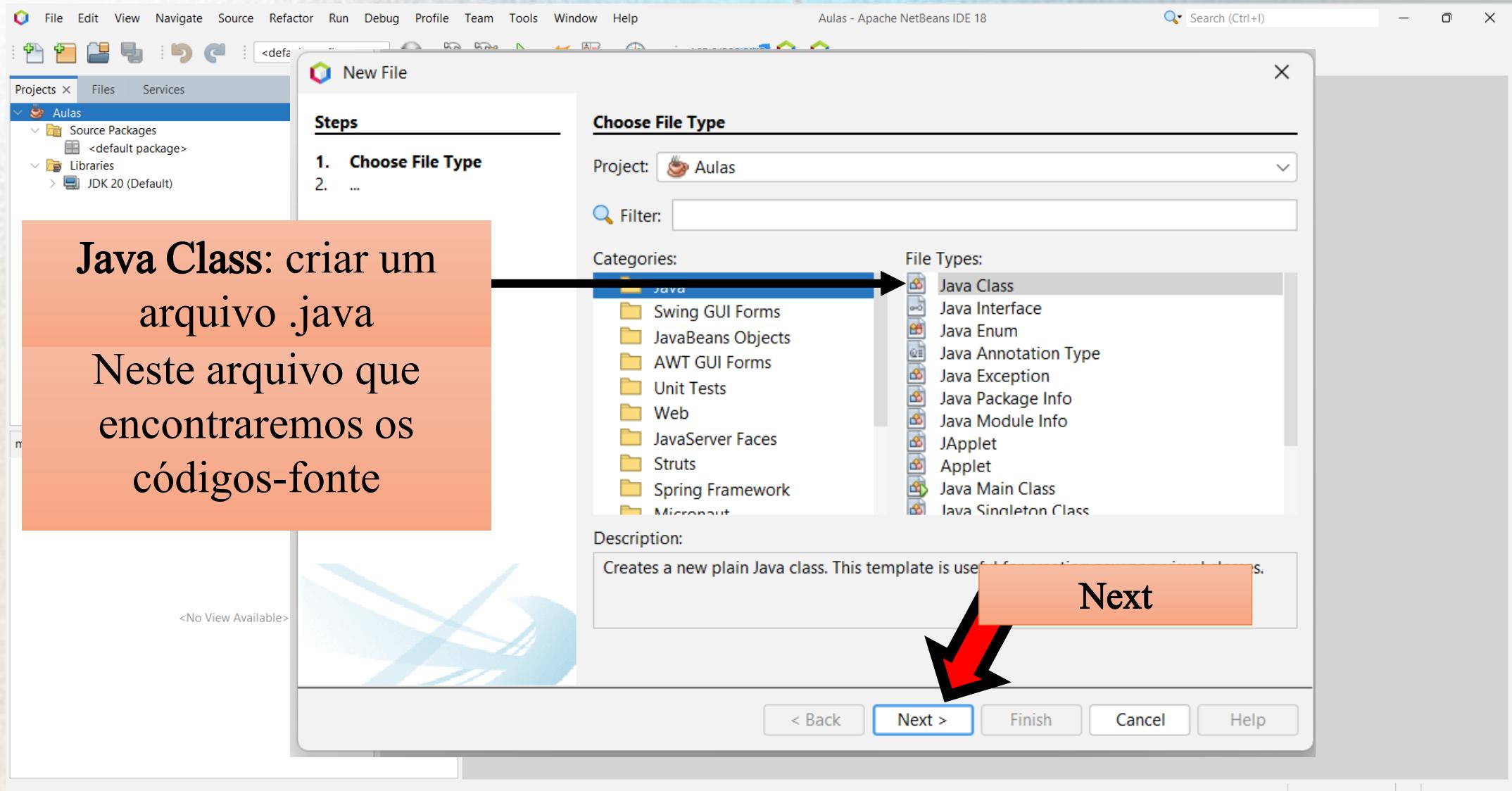
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Pacotes

- Conjunto de pastas e subpastas que organizarão os arquivos do projeto
- Devem ter apenas letras minúsculas
- Hierarquia entre pasta e subpasta é criada colocando **ponto** entre seus nomes.
- O pacote padrão é o **src**

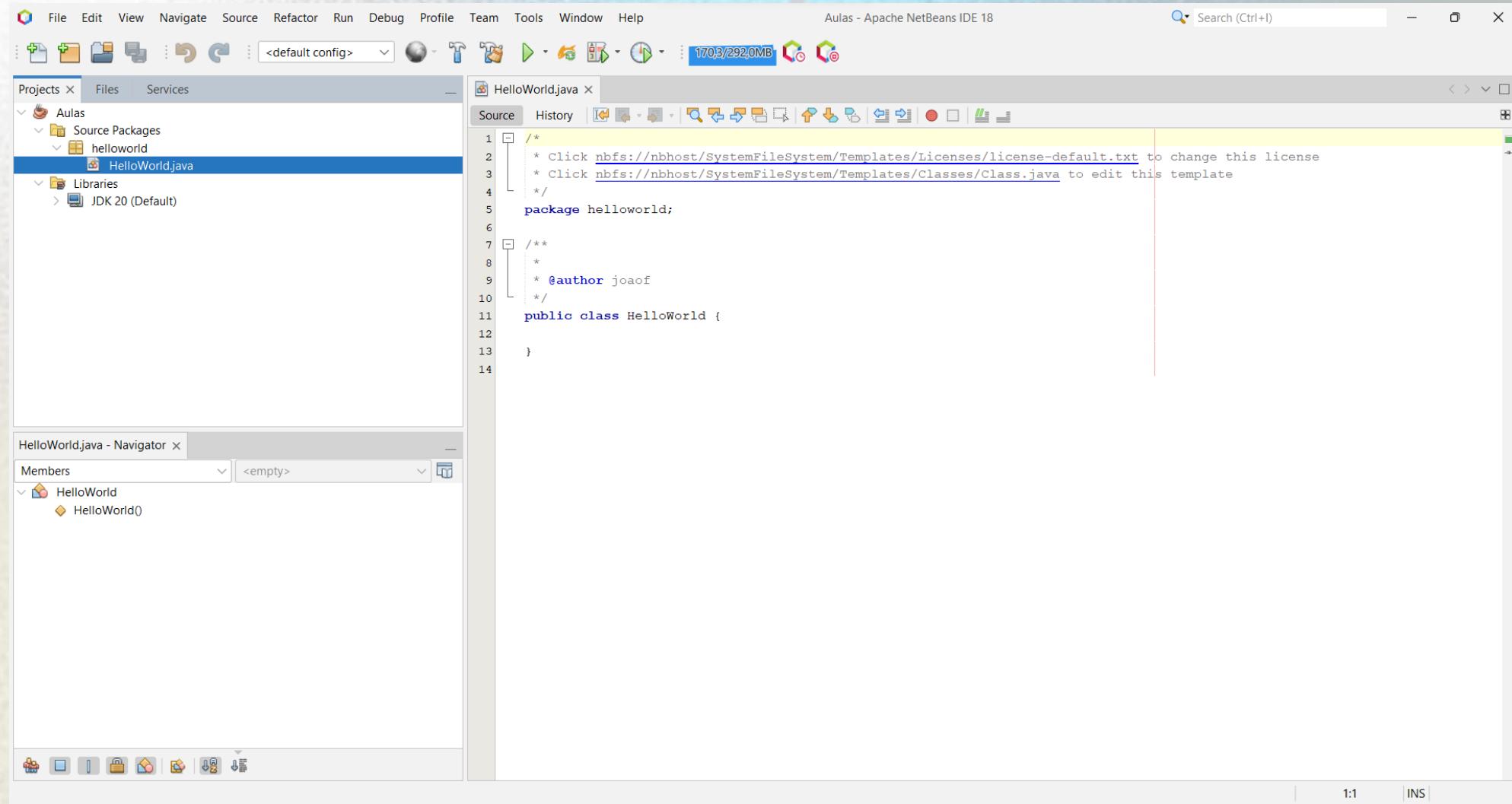
nome da classe

Começar cada palavra com letra Maiúscula

Não usar caracteres especiais

Não separar as palavras por espaço ou underline (_)

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File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Aulas - Apache NetBeans IDE 18

Search (Ctrl+I)

Projects X Files Services

Aulas

Source Packages

helloworld

HelloWorld.java

Libraries

JDK 20 (Default)

HelloWorld.java - Navigator X

Members

HelloWorld

HelloWorld()

170,3 / 292,0 MB

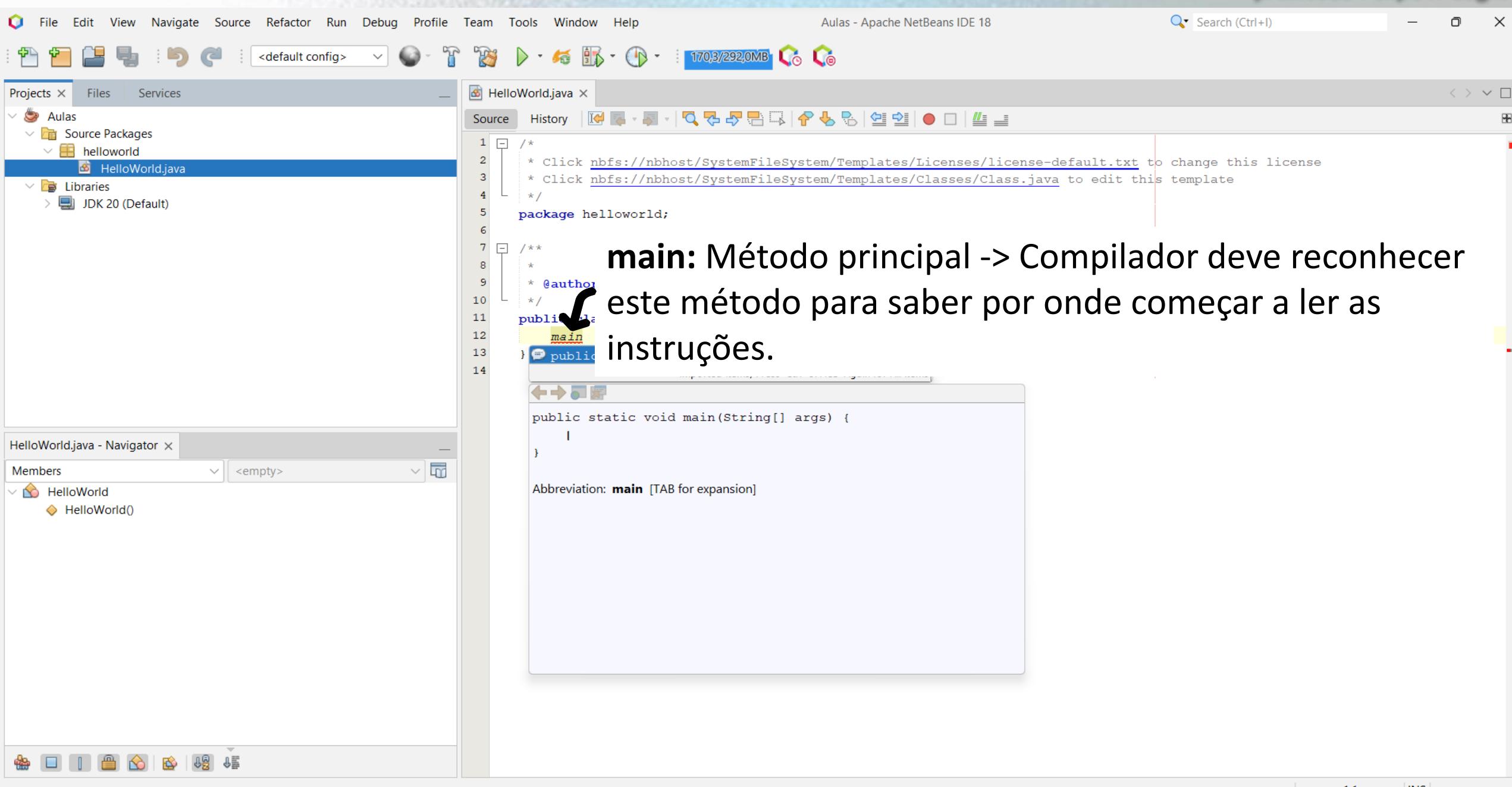
Source History

/*
 * Click nbfs://nbhosted...
 * Click nbfs://nbhosted...
 */
package helloworld;

/**
 *
 * @author joaof
 */
public class HelloWorld {
}

Package: linha que mostra o nome da pasta na qual encontramos o arquivo .java

class: linha que mostra o nome do arquivo .java que receberá as instruções



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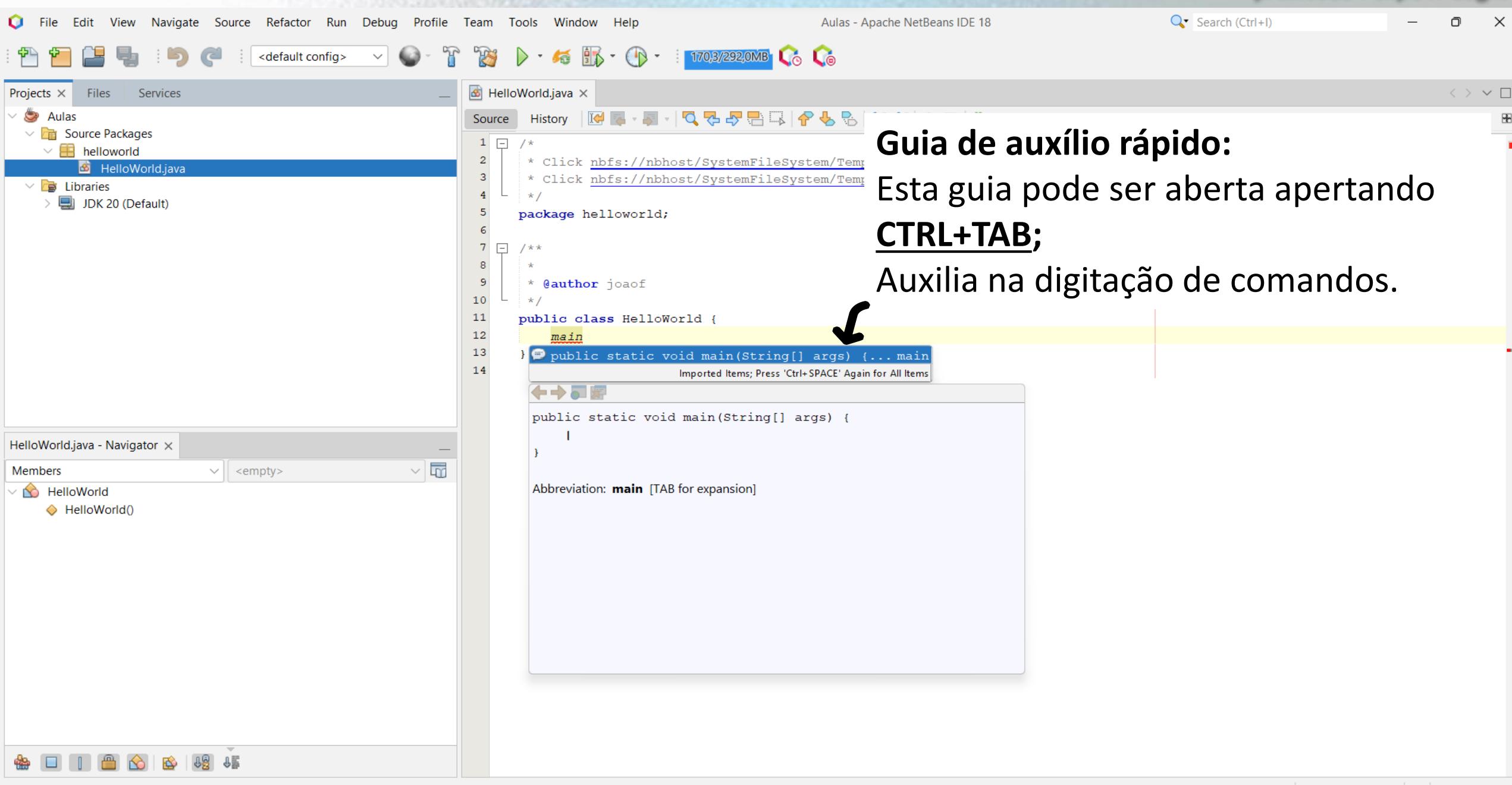
/*
* Click nbfs://nbhost/SystemFileSystem/Temp
* Click nbfs://nbhost/SystemFileSystem/Temp
*/
package helloworld;

/**
*
* @author joaof
*/
public class HelloWorld {
 main
} public static void main(String[] args) {... main
Imported Items; Press 'Ctrl+SPACE' Again for All Items

public static void main(String[] args) {
 }
}

Abbreviation: **main** [TAB for expansion]

Guia de auxílio rápido:
Esta guia pode ser aberta apertando
CTRL+TAB;
Auxilia na digitação de comandos.



The screenshot shows the Apache NetBeans IDE interface. In the center, the code editor displays a Java file named 'HelloWorld.java'. A tooltip is open over the word 'main' in the code, providing information about the abbreviation: 'Abbreviation: main [TAB for expansion]'. A large black arrow points from the text 'Auxilia na digitação de comandos.' down to the tooltip. The IDE's navigation bar at the top includes tabs for 'Source' and 'History', along with various icons for file operations. On the left, the 'Projects' and 'Navigator' panes are visible, showing the project structure and member list respectively. The status bar at the bottom right indicates memory usage ('170,3 / 292,0 MB') and shows the current mode ('INS').

Aulas - Apache NetBeans IDE 18

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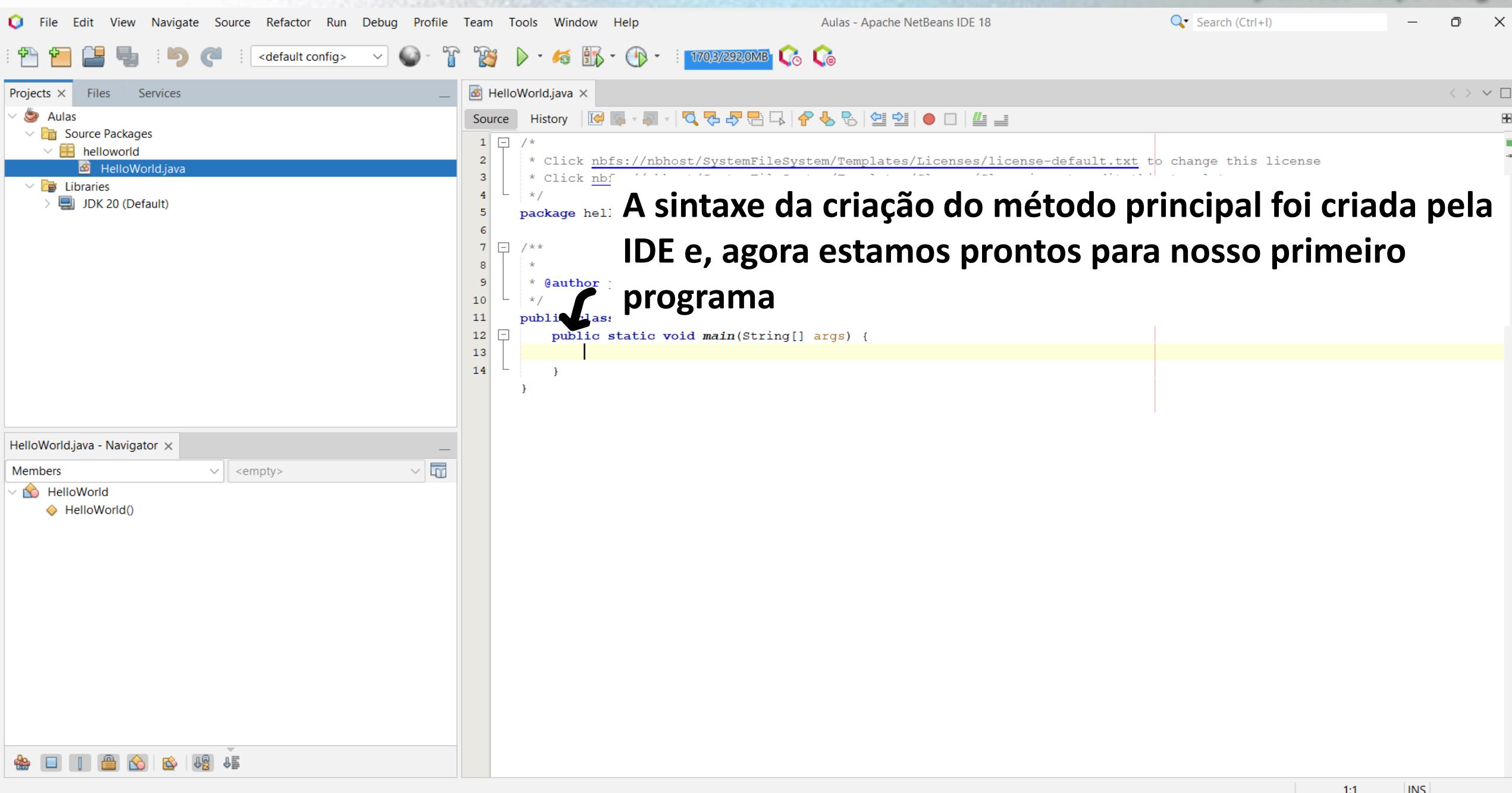
Source History

/*
* Click nbfs://nbhost/SystemFileSystem/Temp
* Click nbfs://nbhost/SystemFileSystem/Temp
*/
package helloworld;

/**
*
* @author joaof
*/
public class HelloWorld {
 main
}
public static void main(String[] args) {... main
 Imported Items; Press 'Ctrl+SPACE' Again for All Items

Abbreviation: **main** [TAB for expansion]

Guia de auxílio rápido:
Com o auxílio das setas do teclado,
escolha a opção que está em azul e
aperte Enter



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Aulas - Apache NetBeans IDE 18

Search (Ctrl+I)

Projects X Files Services

Aulas

Source Packages

helloworld

HelloWorld.java

Libraries

JDK 20 (Default)

HelloWorld.java - Navigator X

Members

HelloWorld

HelloWorld()

170,3 / 292,0 MB

Source History

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package helloworld;

/**
 *
 * @author joaof
 */
public class HelloWorld {
 public static void main(String[] args) {
 System.out.println("Hello World");
 }
}

↑

System -> Informa à JVM que queremos fazer uma requisição de sistema

out -> Informa que esta requisição é do tipo saída

println -> Informa que esta saída enviará alguma informação para um monitor.

Pausa para refletir...

Em Java temos 3 jeitos diferentes de imprimir as informações na tela via terminal:

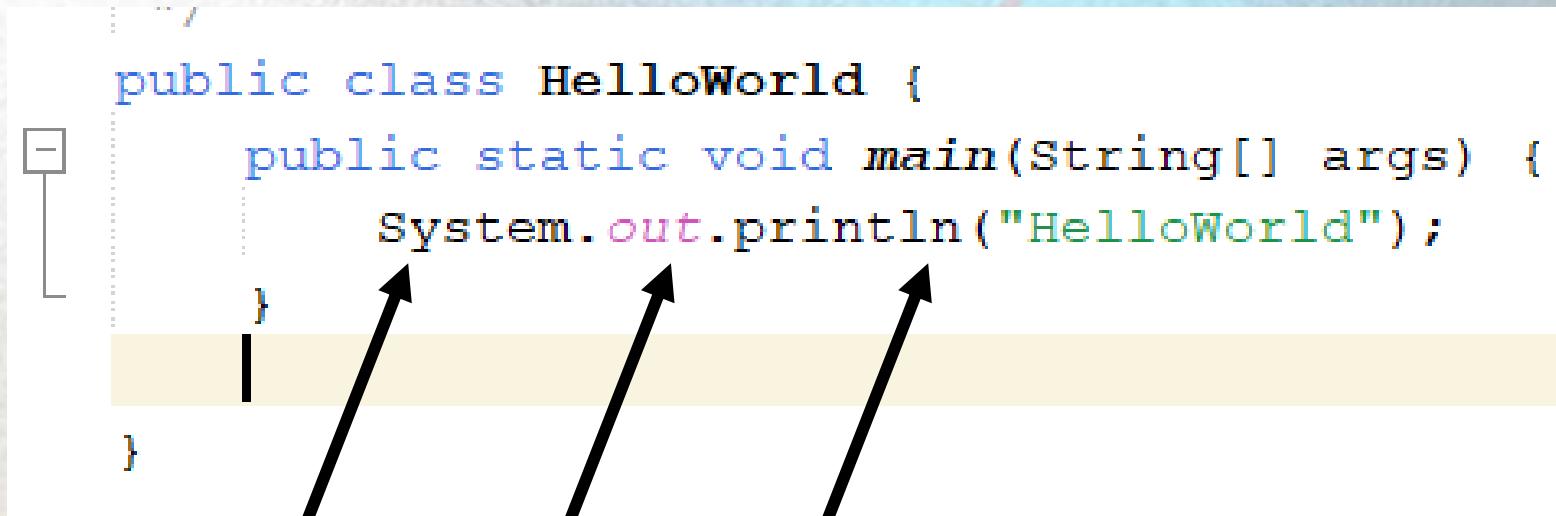
- 1. `println`:**

Este método nos permite imprimir as informações e, no final da impressão, ele automaticamente passa para a próxima linha para uma nova impressão.
- 2. `printf`:**

Este método nos permite imprimir as informações sem quebra automática de linha;
Mas podemos formatar a saída de maneira a ficar mais ajustada de acordo com nossas necessidades.
- 3. `print`:**

Este método nos permite imprimir as informações sem quebra automática de linha;

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```
public class HelloWorld {  
    public static void main(String[] args) {  
        System.out.println("HelloWorld");  
    }  
}
```

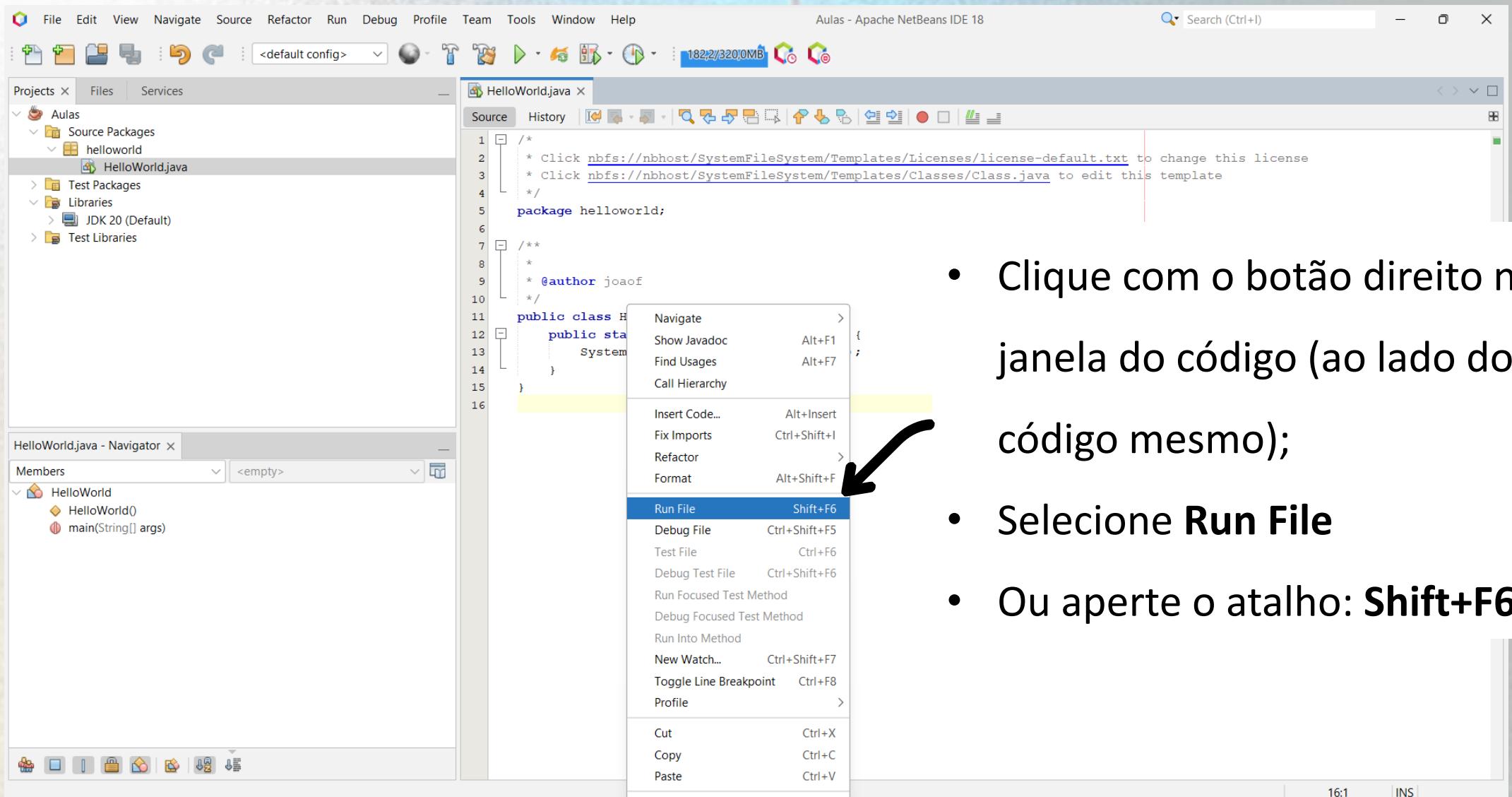
Sistema

Saída

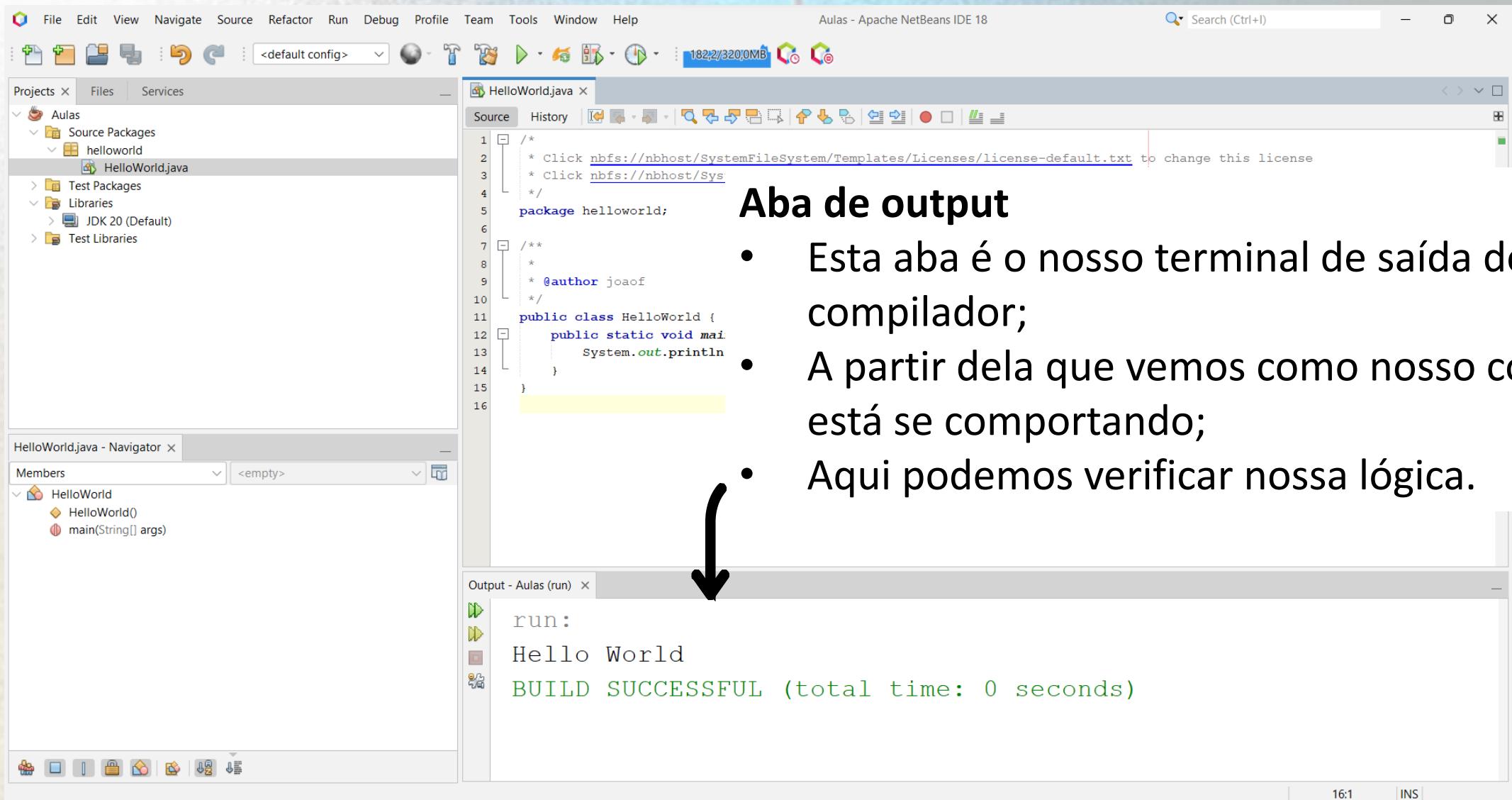
Impressão

Desta maneira podemos imprimir informações nos monitores/telas de qualquer dispositivo com JVM instalada

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Criando nosso primeiro programa



Aba de output

- Esta aba é o nosso terminal de saída do compilador;
- A partir dela que vemos como nosso código está se comportando;
- Aqui podemos verificar nossa lógica.

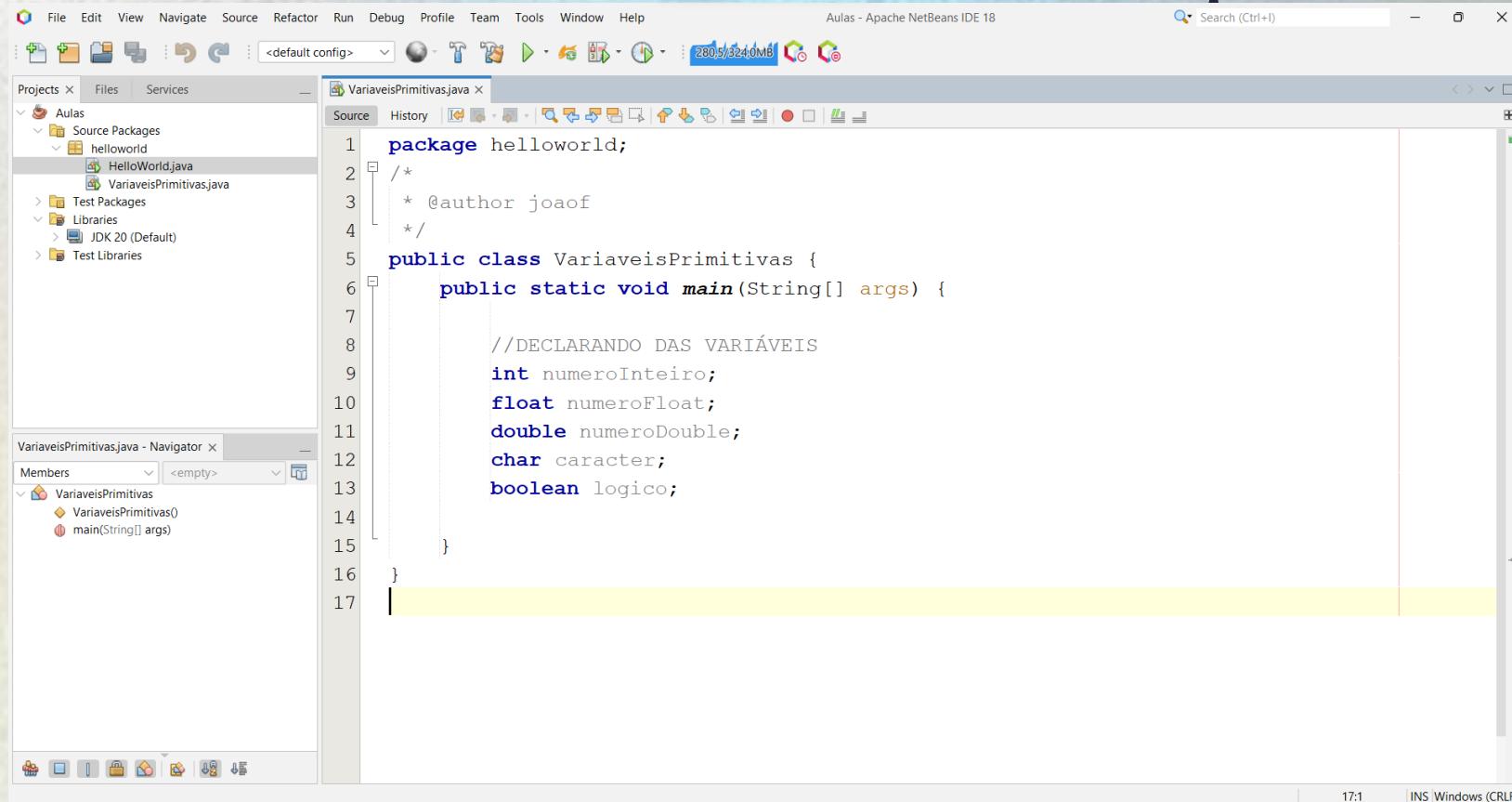
Tipos primitivos de dados

- A tabela abaixo nos mostra quais são as informações básicas que o Java permite inserção;

Família	Tipo Primitivo	Tamanho	Exemplo
Lógico	boolean	1 bit	true
Literais	char	1 byte	'A'
Inteiros	byte	1 byte	127
	short	2 bytes	32.767
	int	4 bytes	2.147.483
	long	8 bytes	2E+63
	float	4 bytes	3,4E+38
Reais	double	8 bytes	1,8E+308

Java, fortemente tipado

- A linguagem Java é denominada como fortemente tipada, ou seja, **todas as variáveis devem ser declaradas de um único tipo de dado.**



The screenshot shows the Apache NetBeans IDE 18 interface. The top menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, and Help. The title bar displays "Aulas - Apache NetBeans IDE 18". The main window has a "Projects X" panel on the left showing a project named "Aulas" with a "Source Packages" node containing "helloworld" and two files: "HelloWorld.java" and "VariaveisPrimitivas.java". Below it are "Test Packages", "Libraries", and "Test Libraries". The central area is a code editor titled "VariaveisPrimitivas.java" with the following content:

```
1 package helloworld;
2 /*
3  * @author joaoef
4 */
5 public class VariaveisPrimitivas {
6     public static void main(String[] args) {
7
8         //DECLARANDO DAS VARIÁVEIS
9         int numeroInteiro;
10        float numeroFloat;
11        double numeroDouble;
12        char caracter;
13        boolean logico;
14    }
15 }
16
17 }
```

The code uses color coding for Java keywords (blue), comments (green), and identifiers (black). The "VariaveisPrimitivas.java - Navigator x" panel on the bottom left shows the class definition and its main method. The status bar at the bottom right indicates "17:1" and "INS Windows (CRLF)".

Fessô... O que é esse negócio de variável aí?

- Variável é um espaço da memória RAM que será alocado para armazenar as informações do nosso programa enquanto ele estiver rodando



```
public class VariaveisPrimitivas {  
    public static void main(String[] args) {  
  
        // DECLARANDO DAS VARIÁVEIS  
        int numeroInteiro;  
        float numeroFloat;  
        double numeroDouble;  
        char caracter;  
        boolean logico;  
    }  
}
```