

Android Studio

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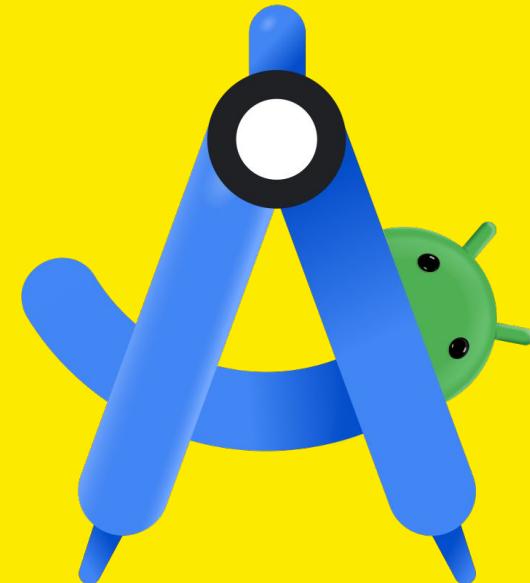
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1. ANDROID STUDIO COMO IDE

Android Studio es el IDE oficial para el desarrollo de aplicaciones Android. Está basado en IntelliJ y ofrece herramientas especializadas para el diseño, desarrollo, prueba y depuración de aplicaciones para Android.

Como características principales cuenta con:

- Finalización de código inteligente
- Vista previa en tiempo real para diferentes dispositivos
- Android Emulator
- Cuenta con una consola de desarrollador



GUÍA DE INSTALACIÓN EN LINUX

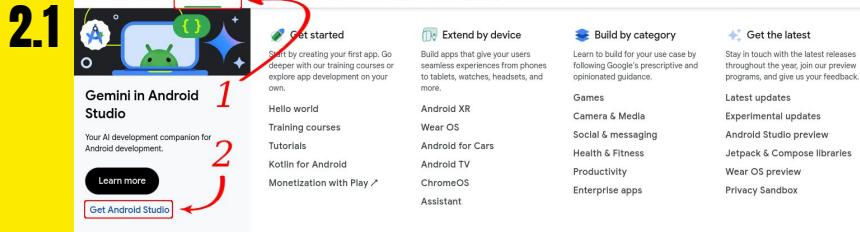
1 - Actualiza / instala dependencias

```
$ sudo apt-get install libc6:i386 libncurses5:i386 libstdc++6:i386 lib32z1 libbz2-1.0:i386
```

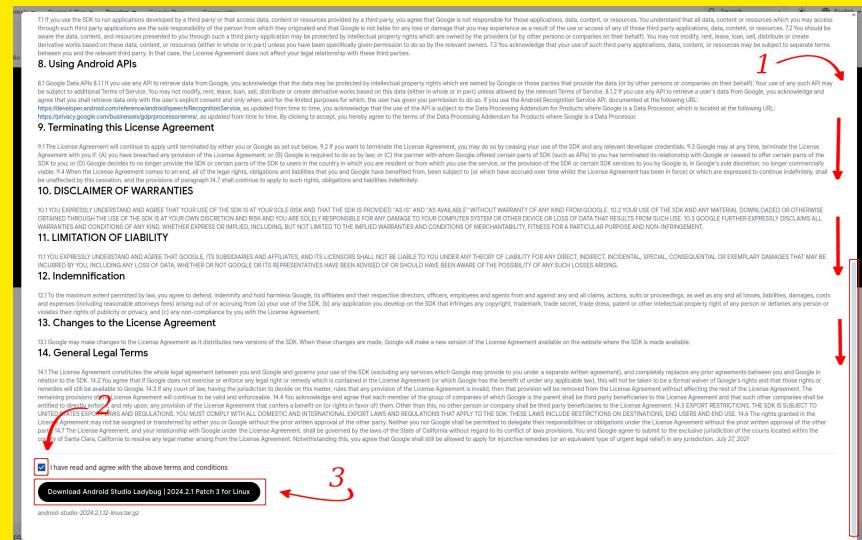
```
manuel@pclinux23:~$ sudo apt install libc6:i386 libncurses5:i386 libstdc++6:i386 lib32z1 libbz2-1.0:i386
Leyendo lista de paquetes... Hecho
Creando árbol de dependencias
Leyendo la información de estado... Hecho
libbz2-1.0:i386 ya está en su versión más reciente (1.0.8-2).
lib32z1 ya está en su versión más reciente (1:1.2.11.dfsg-2ubuntu1.5).
libc6:i386 ya está en su versión más reciente (2.31-0ubuntu9.16).
libstdc++6:i386 ya está en su versión más reciente (10.5.0-1ubuntu1~20.04).
libncurses5:i386 ya está en su versión más reciente (6.2-0ubuntu2.1).
0 actualizados, 0 nuevos se instalarán, 0 para eliminar y 67 no actualizados.
manuel@pclinux23:~$
```

GUÍA DE INSTALACIÓN EN LINUX

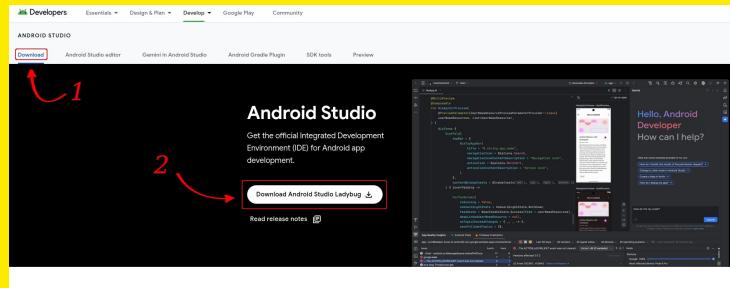
2 - Descarga Android Studio



2.1



2.3

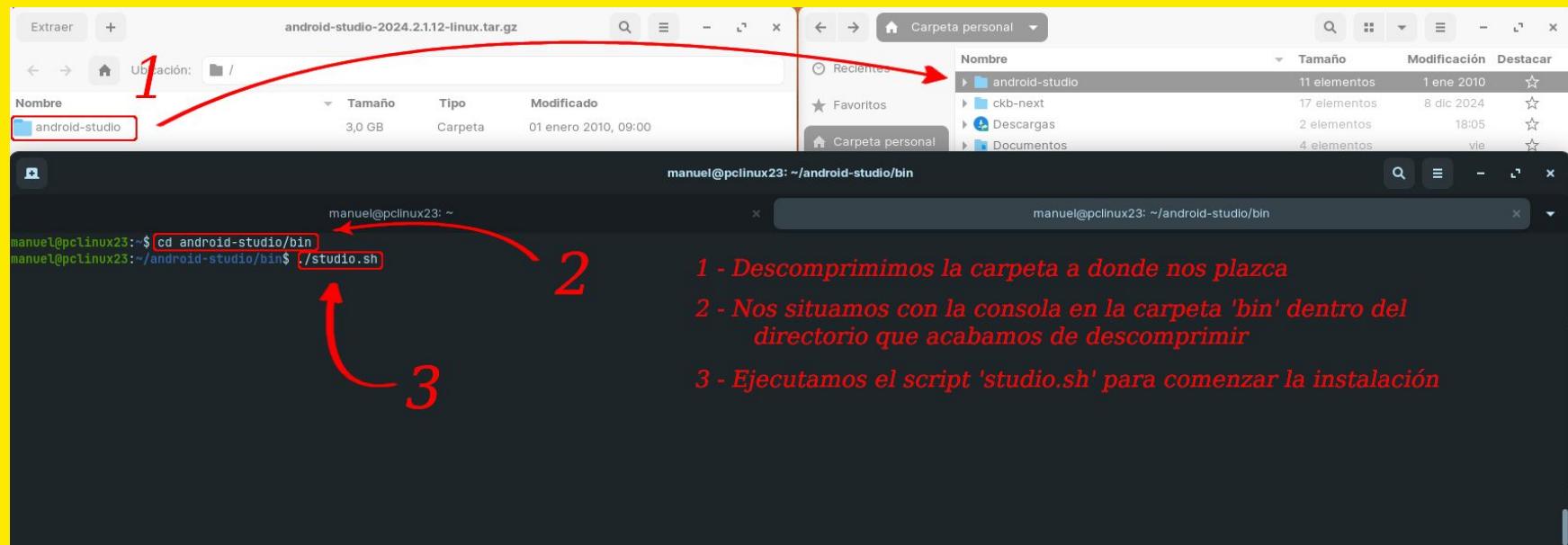


2.2

GUÍA DE INSTALACIÓN EN LINUX

3 - Descomprime y ejecuta script de instalación

3.1



GUÍA DE INSTALACIÓN EN LINUX

3 - Descomprime y ejecuta script de instalación

3.2

```
manuel@pclinux23: ~/android-studio/bin
manuel@pclinux23: ~
manuel@pclinux23: ~/android-studio/bin
n.overrides for more details.
2025-01-06 18:29:10,710 [    961]  WARN - c.i.o.u.r.overrides - Conflicting registry key definition for key unknown.sdk.auto: it was defined by plugin com.intellij but redefined by plugin org.jetbrains.android. Consider adding overrides="true" for one of the plugins, see the documentation for com.intellij.openapi.util.registry.RegistryKeyBean.overrides for more details.
2025-01-06 18:29:10,711 [    962]  WARN - c.i.o.u.r.overrides - Conflicting registry key definition own.sdk.modal.jps: it was defined by plugin com.intellij but redefined by plugin org.jetbrains.android.adding overrides="true" for one of the plugins, see the documentation for com.intellij.openapi.util.RegistryKeyBean.overrides for more details.
2025-01-06 18:29:10,711 [    962]  WARN - c.i.o.u.r.overrides - Conflicting registry key definition own.show.editor.actions: it was defined by plugin com.intellij but redefined by plugin org.jetbrains.android. Consider adding overrides="true" for one of the plugins, see the documentation for com.intellij.openapi.registry.RegistryKeyBean.overrides for more details.
2025-01-06 18:29:10,711 [    962]  WARN - c.i.o.u.r.overrides - Conflicting registry key definition le.phased.sync.enabled: it was defined by plugin com.intellij.gradle but redefined by plugin org.jetbrains.gradle. Consider adding overrides="true" for one of the plugins, see the documentation for com.intellij.openapi.registry.RegistryKeyBean.overrides for more details.
2025-01-06 18:29:10,907 [   1158]  WARN - #c.i.o.a.Application - issue detected: ide.script.launcher
2025-01-06 18:29:13,037 [   3288]  WARN - #com.android.tools.idea.updater.SdkComponentSource - Error parsing:
2025-01-06 18:29:13,037 [   3288]  WARN - #com.android.tools.idea.updater.SdkComponentSource - Additional fallback loader failed to parse the XML.
2025-01-06 18:29:13,086 [   3337]  WARN - #com.android.tools.idea.updater.SdkComponentSource - Errors during XML parsing:
2025-01-06 18:29:13,086 [   3337]  WARN - #com.android.tools.idea.updater.SdkComponentSource - Additionally, the fallback loader failed to parse the XML.
```

Help improve Android Studio

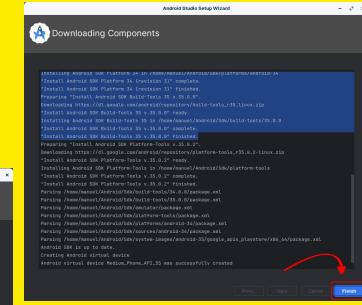
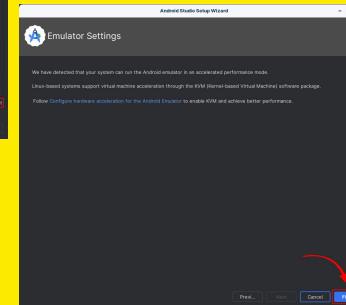
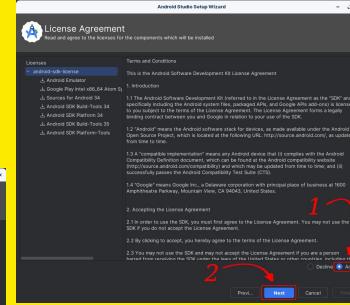
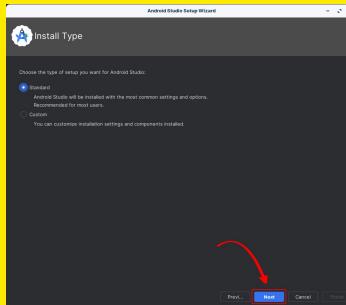
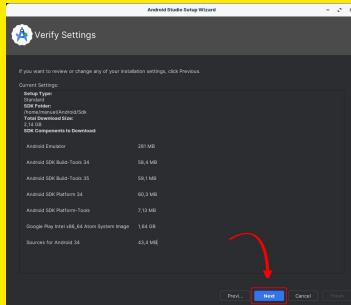
Allow Google to collect usage data for Android Studio and its related tools, such as how you use features and resource usage along with software identifiers such as package name and class names and plugin configuration. This data helps improve Android Studio and is collected in accordance with Google's Privacy Policy. Anonymous and aggregated usage data may be shared with Google's partners to improve Android Studio.

You can always change this behavior in Settings | Appearance & Behavior | System Settings | Data Sharing.

GUÍA DE INSTALACIÓN EN LINUX

3 - Descomprime y ejecuta script de instalación (next next next...)

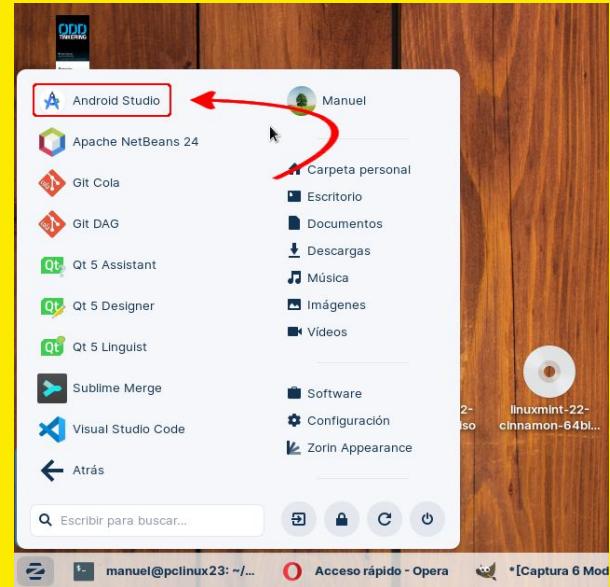
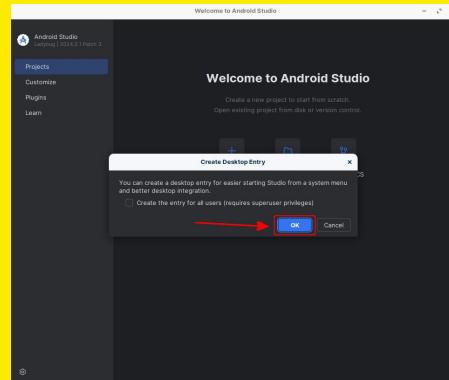
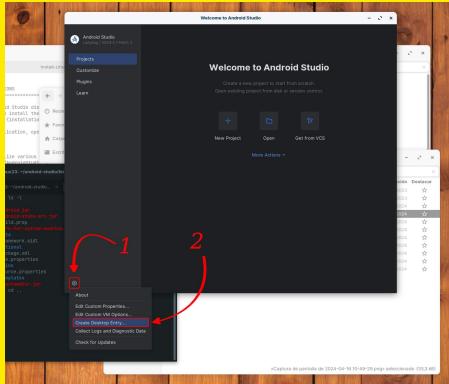
3.3



GUÍA DE INSTALACIÓN EN LINUX

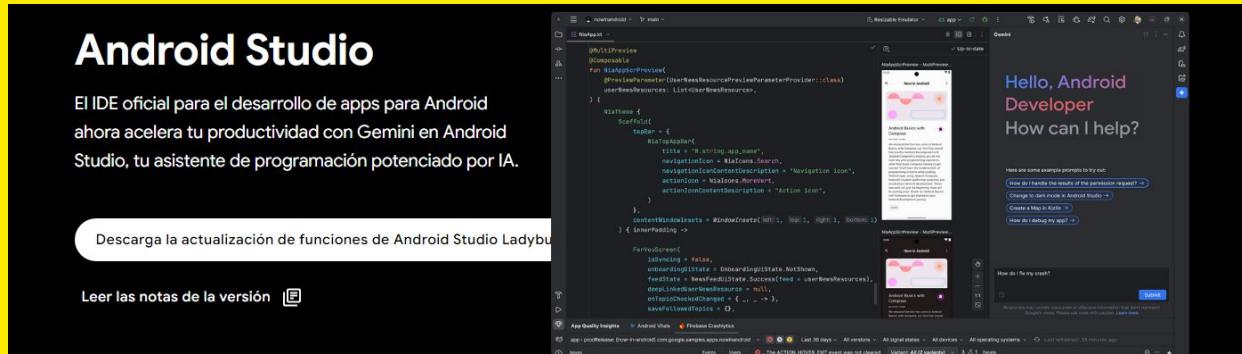
3 - Descomprime y ejecuta script de instalación (next next next...)

3.4 Añadimos
Android Studio al
menú de inicio



GUÍA DE INSTALACIÓN EN WINDOWS

VERSIÓN ACTUAL ESTABLE (RECOMENDADA)



VERSIONES ANTERIORES O PRELIMINARES
sección de archivo en el menú de desarrollo, en la propia página oficial de android studio

This screenshot shows the "Archivos de descarga de Android Studio" (Download files for Android Studio) page. It features a heading, a paragraph about finding the latest stable or beta versions, and a section for the Android Emulator. At the bottom, there's a navigation bar with links for Developers, Imprescindibles, Diseño y planificación, Desarrollo, Más, Language, and Acceder.

GUÍA DE INSTALACIÓN EN WINDOWS

Descarga

SHOULD HAVE BEEN AWARE OF THE POSSIBILITY OF ANY SUCH LOSSES ARISING.

12. Indemnification

12.1 To the maximum extent permitted by law, you agree to defend, indemnify and hold harmless Google, its affiliates and their respective directors, officers, employees and agents from and against any and all claims, actions, suits or proceedings, as well as any and all losses, liabilities, damages, costs and expenses (including reasonable attorneys fees) arising out of or occurring from (a) your use of the SDK, (b) any application you develop on the SDK that infringes any copyright, trademark, trade secret, trade dress, patent or other intellectual property right of any person or defames any person or violates their rights of publicity or privacy, and (c) any non-compliance by you with the License Agreement.

13. Changes to the License Agreement

13.1 Google may make changes to the License Agreement as it distributes new versions of the SDK. When these changes are made, Google will make a new version of the License Agreement available on the website where the SDK is made available.

14. General Legal Terms

14.1 The License Agreement constitutes the whole legal agreement between you and Google and governs your use of the SDK (excluding any services which Google may provide to you under a separate written agreement), and completely replaces any prior agreements between you and Google in relation to the SDK. 14.2 You agree that if Google does not exercise or enforce any legal right or remedy which is contained in the License Agreement (or which Google has the benefit of under any applicable law), this will not be taken to be a formal waiver of Google's rights and that those rights or remedies will still be available to Google. 14.3 If any court of law, having the jurisdiction to decide on this matter, rules that any provision of the License Agreement is invalid, then that provision will be removed from the License Agreement without affecting the rest of the License Agreement. The remaining provisions of the License Agreement will continue to be valid and enforceable. 14.4 You acknowledge and agree that each member of the group of companies of which Google is the parent shall be third party beneficiaries to the License Agreement and that such other companies shall be entitled to directly enforce, and rely upon, any provision of the License Agreement that confers a benefit on (or rights in favor of) them. Other than this, no other person or company shall be third party beneficiaries to the License Agreement. 14.5 EXPORT RESTRICTIONS. THE SDK IS SUBJECT TO UNITED STATES EXPORT LAWS AND REGULATIONS. YOU MUST COMPLY WITH ALL DOMESTIC AND INTERNATIONAL EXPORT LAWS AND REGULATIONS THAT APPLY TO THE SDK. THESE LAWS INCLUDE RESTRICTIONS ON DESTINATIONS, END USERS AND END USE. 14.6 The rights granted in the License Agreement may not be assigned or transferred by either you or Google without the prior written approval of the other party. Neither you nor Google shall be permitted to delegate their responsibilities or obligations under the License Agreement without regard to its conflict of laws provisions. You and Google agree to submit to the exclusive jurisdiction of the courts located within the county of Santa Clara, California to resolve any legal matter arising from the License Agreement. Notwithstanding this, you agree that Google shall still be allowed to apply for injunctive remedies (or an equivalent type of urgent legal relief) in any jurisdiction. July 27, 2021

I have read and agree with the above terms and conditions

[Download Android Studio Ladybug Feature Drop | 2024.2.2 for Windows](#)

android-studio-2024.2.2.13-windows.exe

GUÍA DE INSTALACIÓN EN WINDOWS

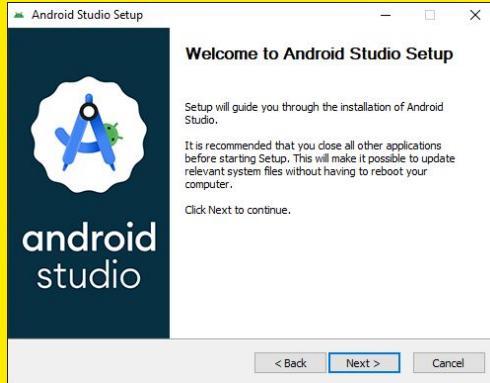
Contamos también con la opción de instalar en paralelo la versión estable y la versión preliminar y trabajar en ambas sobre los mismos proyectos de apps.

Esta posibilidad se debe a que Android Studio almacena la configuración de cada versión instalada en una carpeta específica.

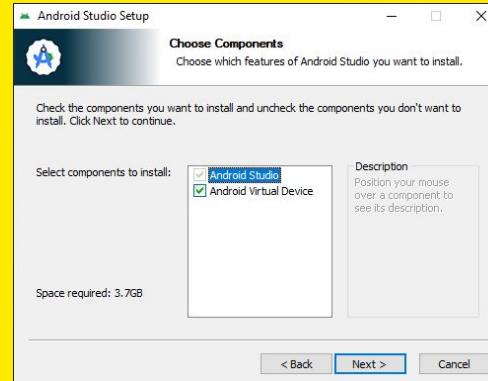
```
C:\Users\Cristian\.AndroidStudio2.3\  
C:\Users\Cristian\.AndroidStudioPreview3.0\
```

GUÍA DE INSTALACIÓN EN WINDOWS

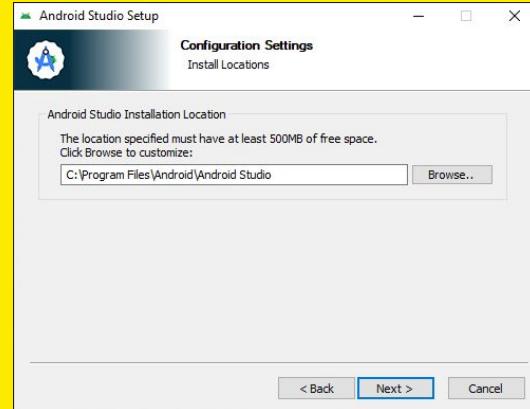
Pasos de instalación



2.



1.

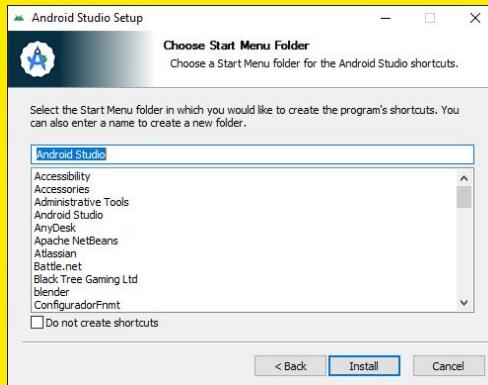


3.

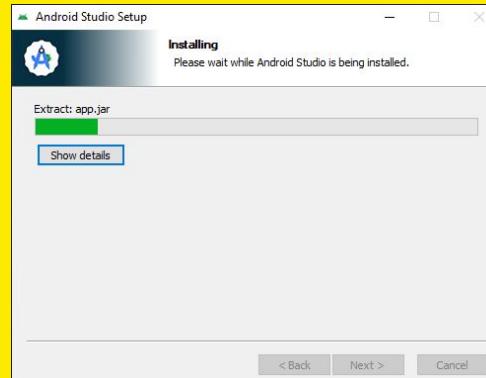


GUÍA DE INSTALACIÓN EN WINDOWS

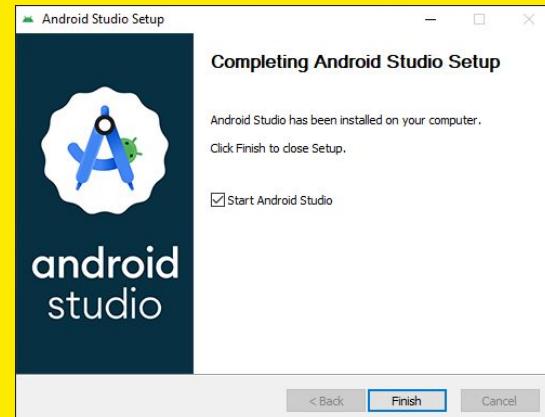
Pasos de instalación



5.



4.

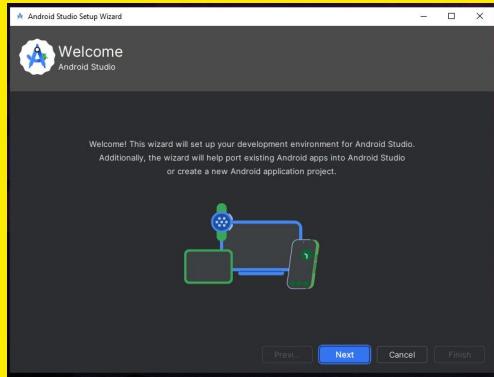


6.

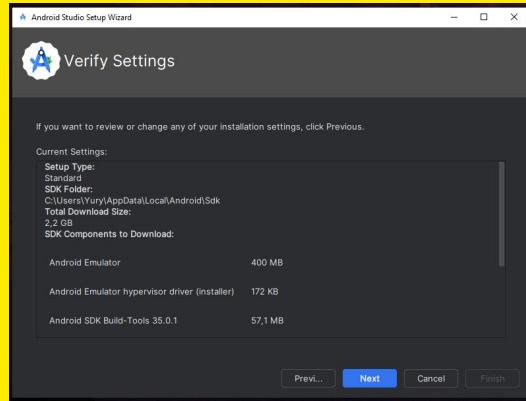
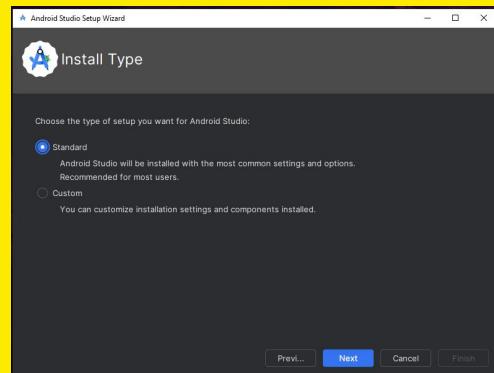
GUÍA DE INSTALACIÓN EN WINDOWS

Iniciando el IDE

3.3



2.



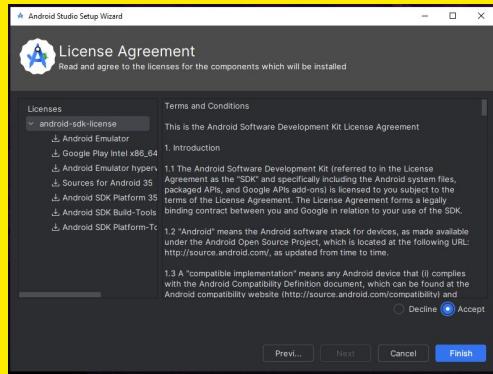
1.

3.

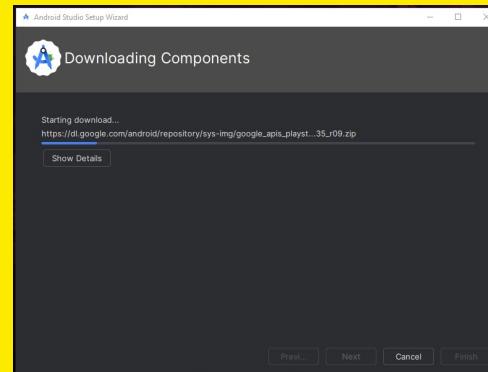
GUÍA DE INSTALACIÓN EN WINDOWS

Iniciando el IDE

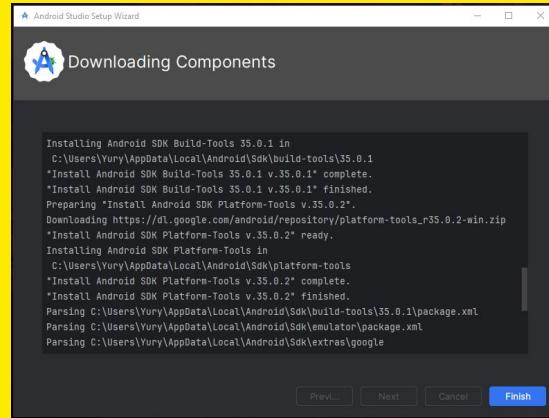
3.3



5.



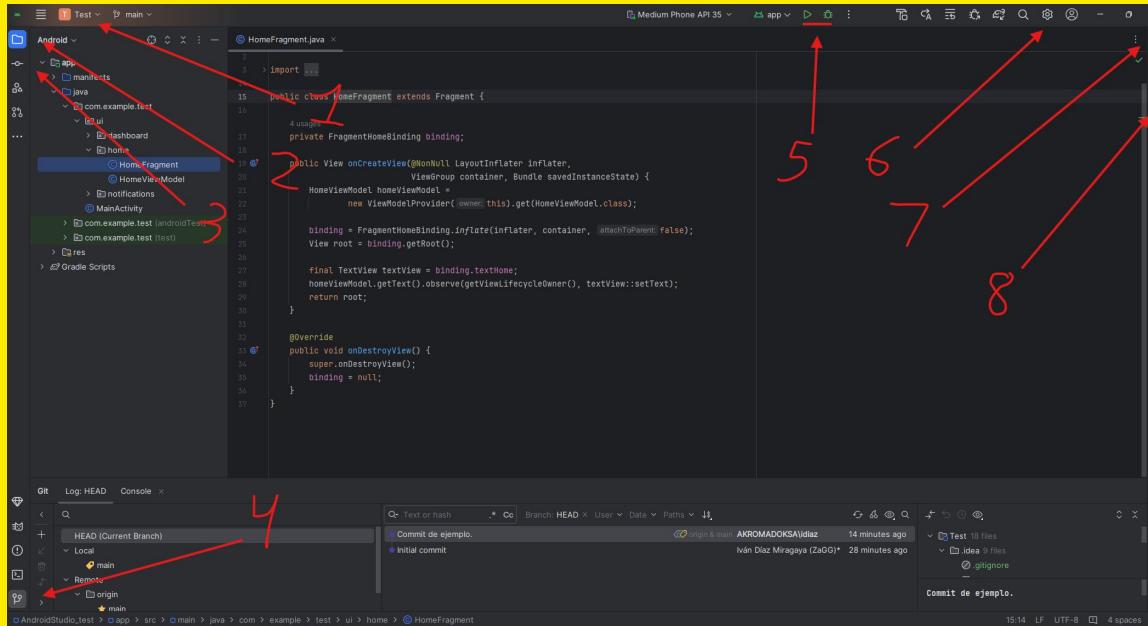
4.



6.

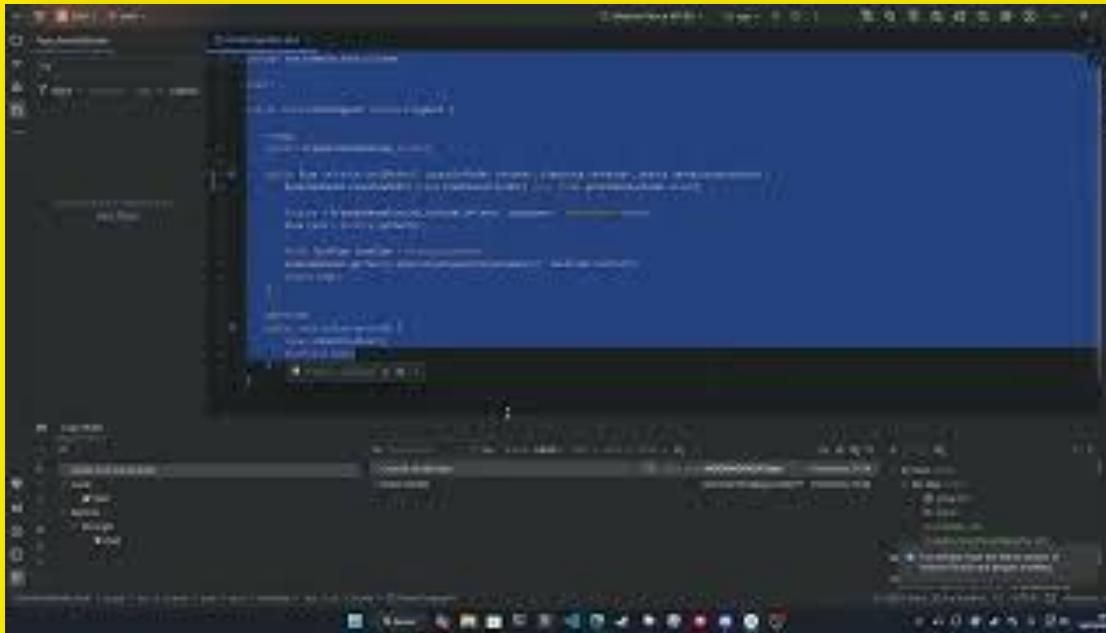
INTERFAZ DE ANDROID STUDIO

1- Vistazo general



INTERFAZ DE ANDROID STUDIO

2 - Video Explicativo

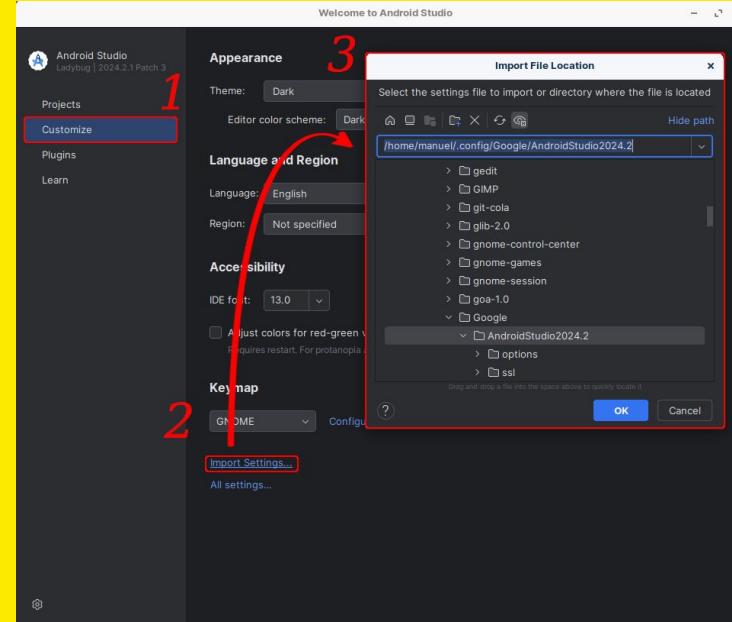


Importación - Exportación

1 - Importación

1.1 - Desde el launcher

Tan sólo debemos seleccionar el archivo que previamente hayamos exportado

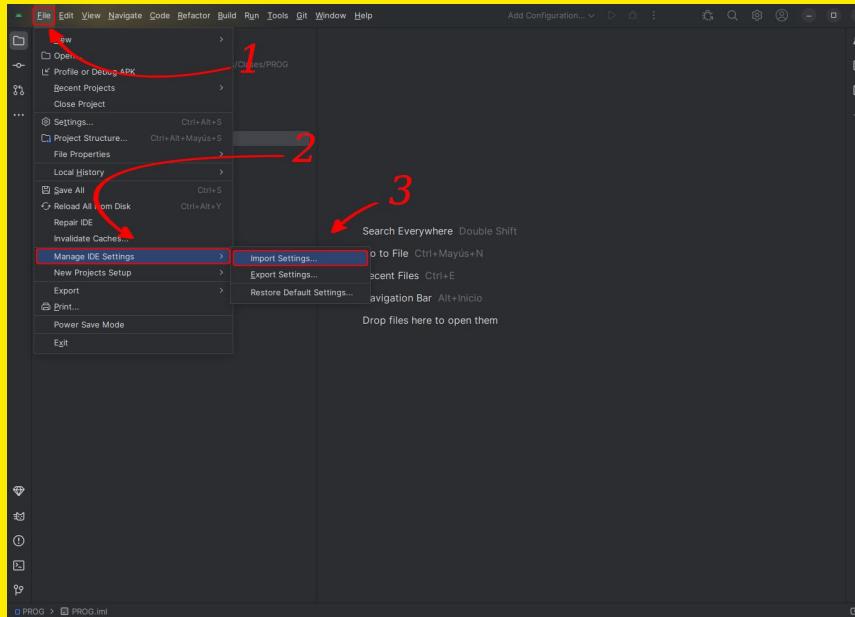


Importación - Exportación

1 - Importación

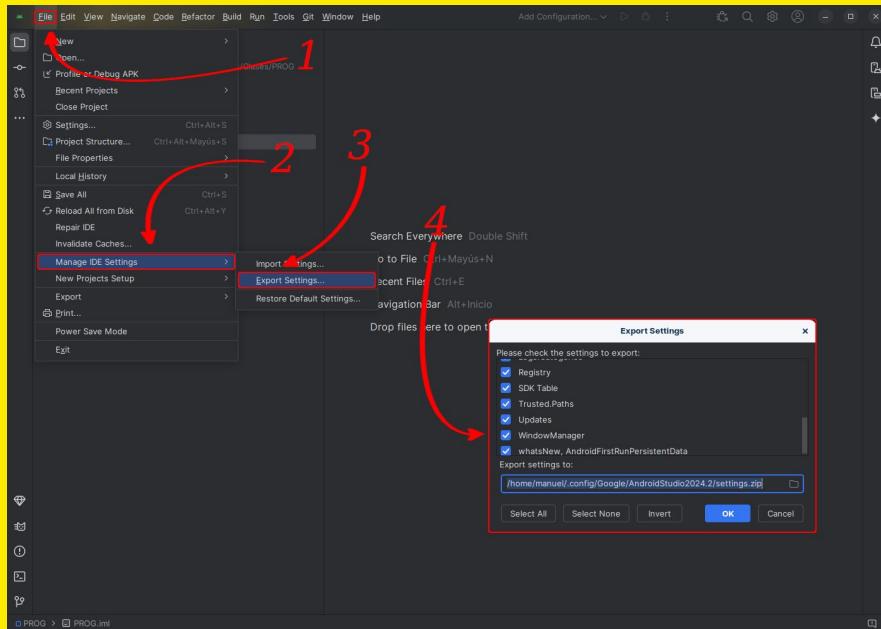
1.2 - Desde un proyecto ya abierto

Tan sólo debemos seleccionar el archivo que previamente hayamos exportado



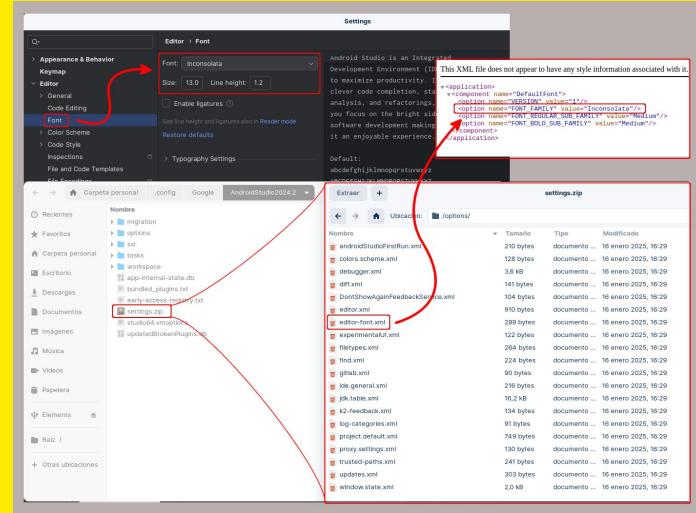
Importación - Exportación

2 - Exportación



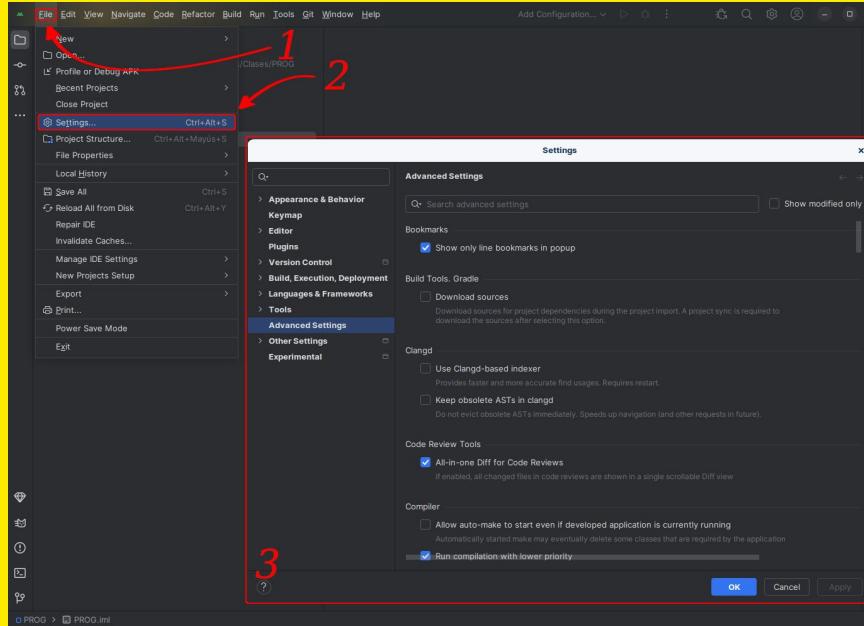
Seleccionaremos aquellos aspectos de la configuración que queramos exportar y a dónde

(abajo un ejemplo)



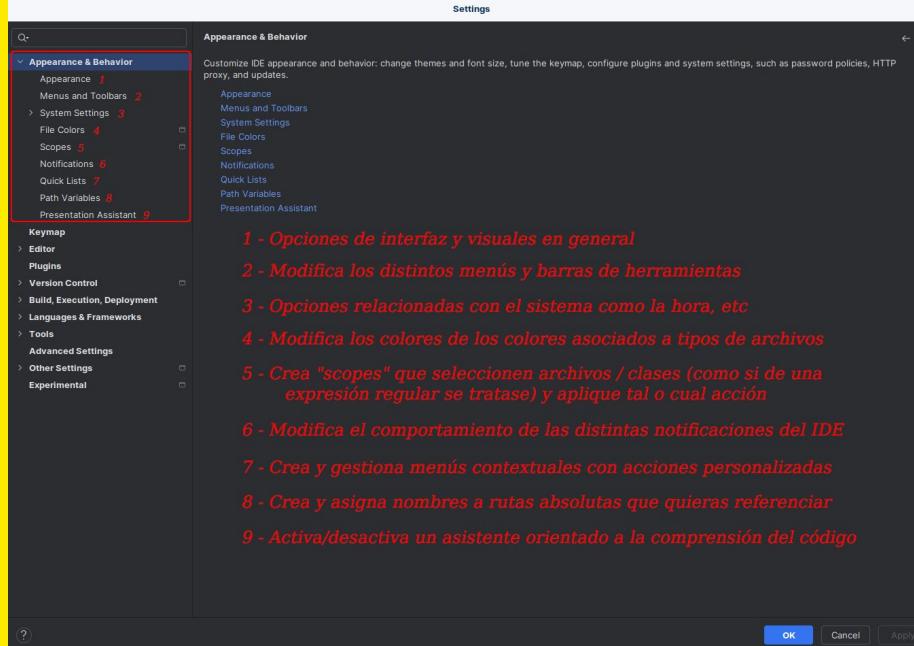
CONFIGURACIÓN DEL IDE

1 - Accediendo a menú de configuración



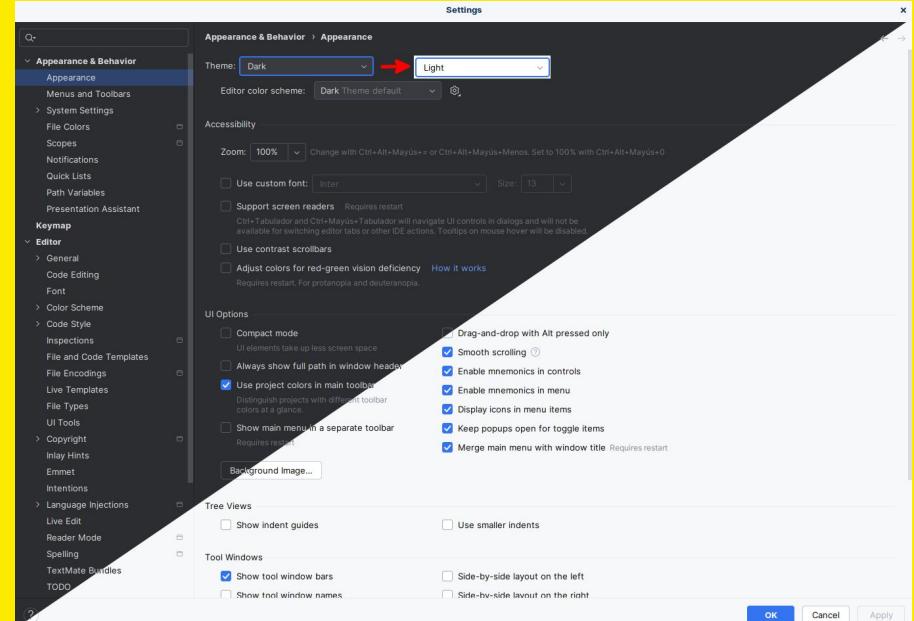
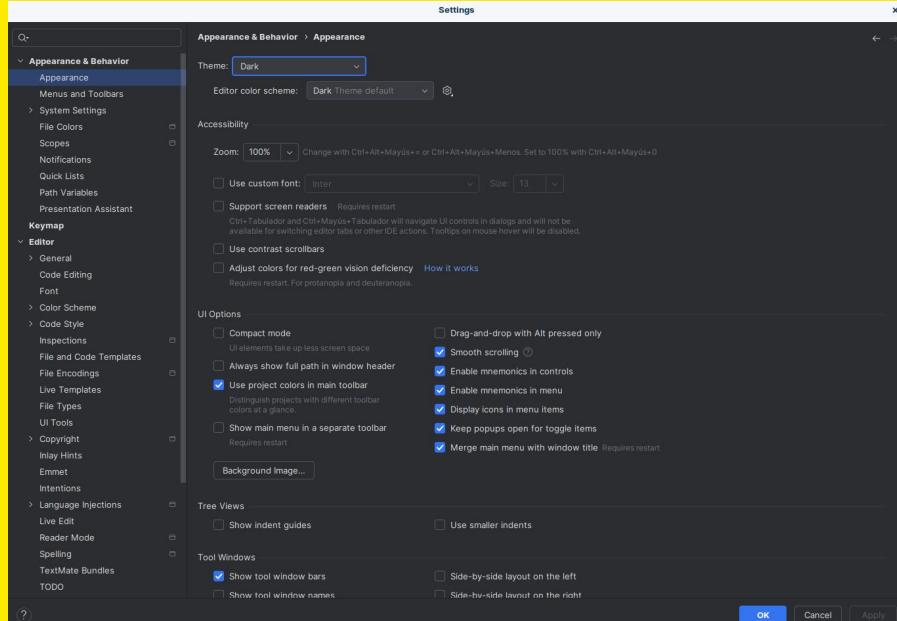
CONFIGURACIÓN DEL IDE

2 - Apariencia



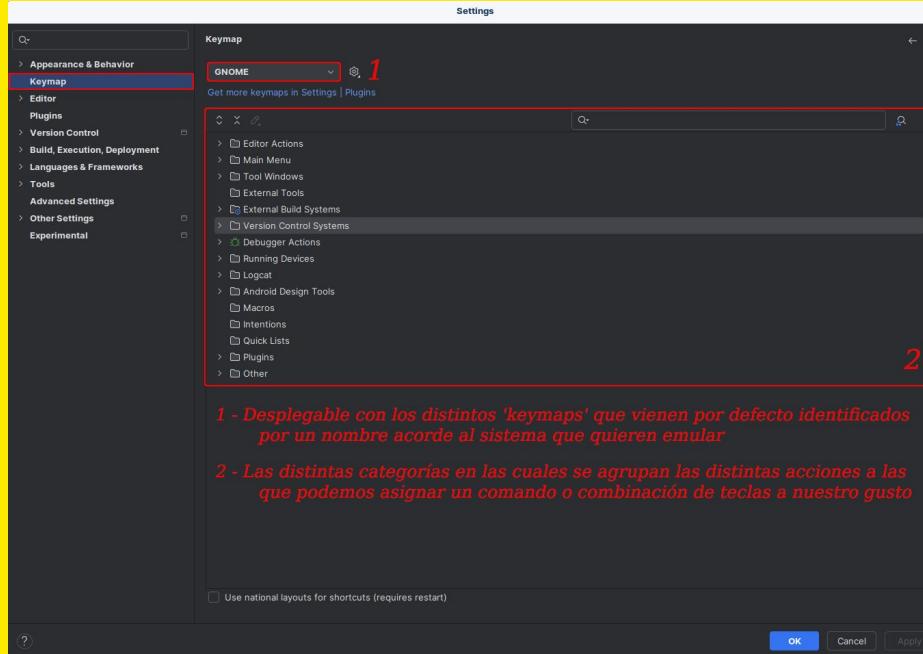
CONFIGURACIÓN DEL IDE

2 - Apariencia (ejemplo)



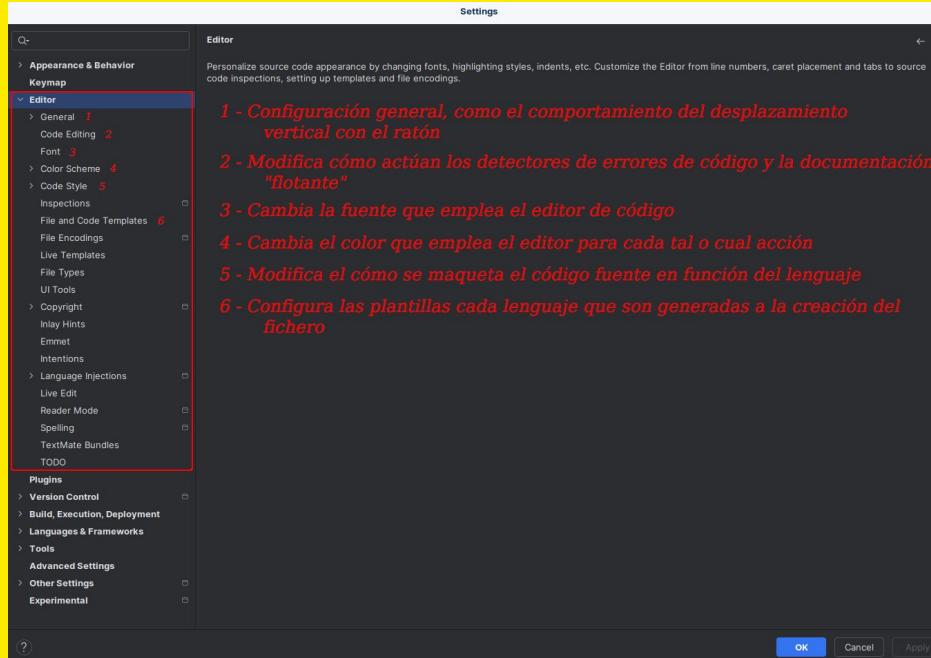
CONFIGURACIÓN DEL IDE

3 - Keymap(s)



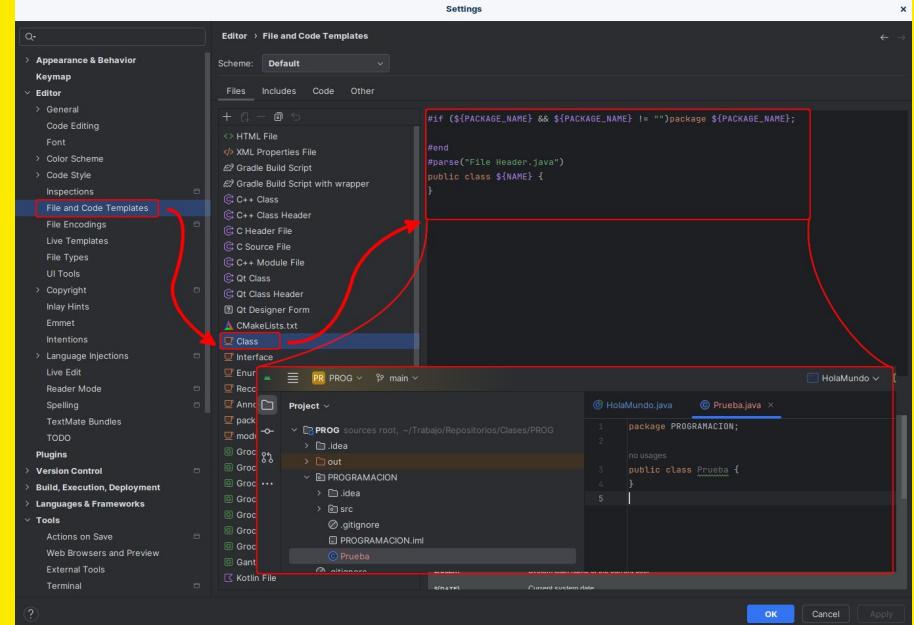
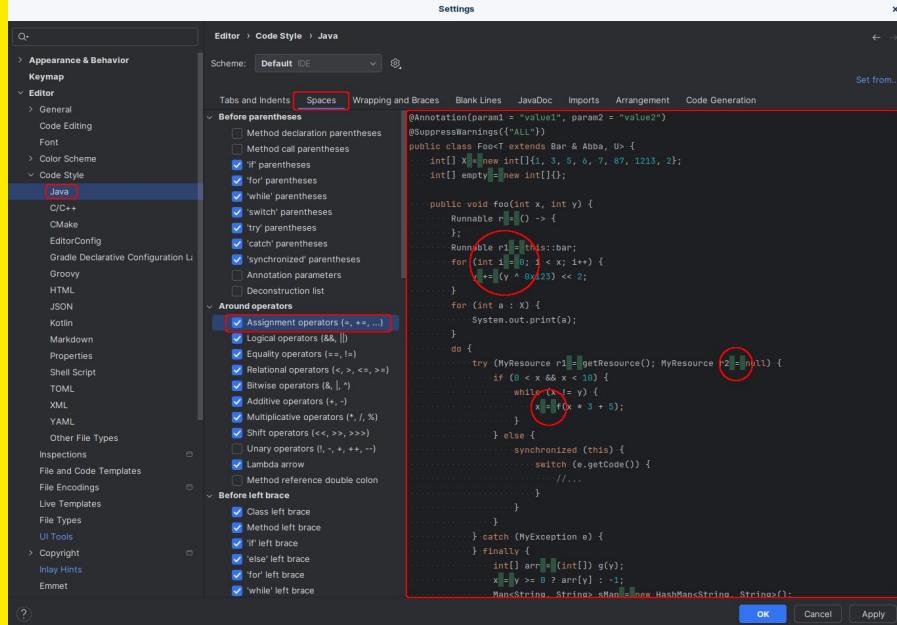
CONFIGURACIÓN DEL IDE

4 - Editor



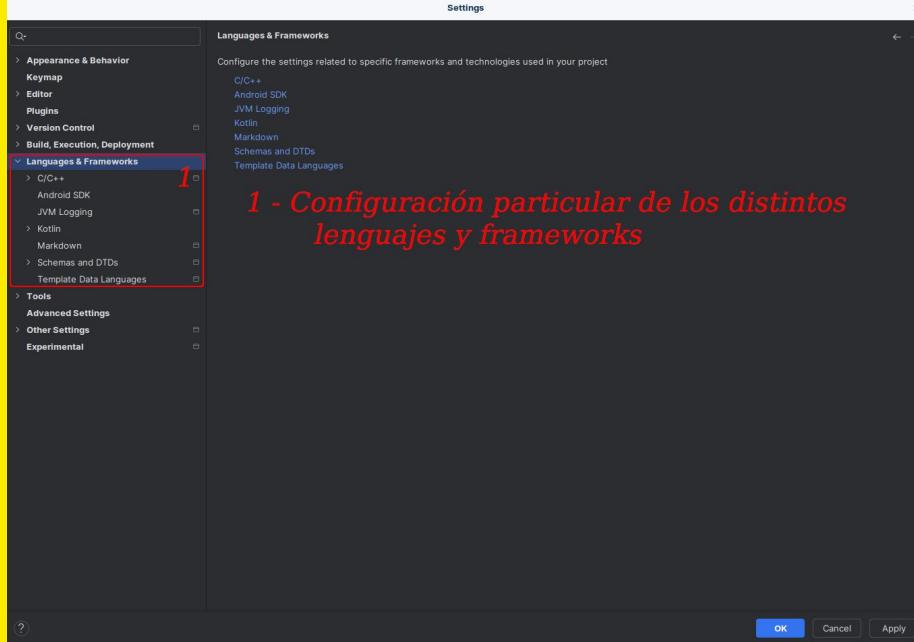
CONFIGURACIÓN DEL IDE

4 - Editor (ejemplos)



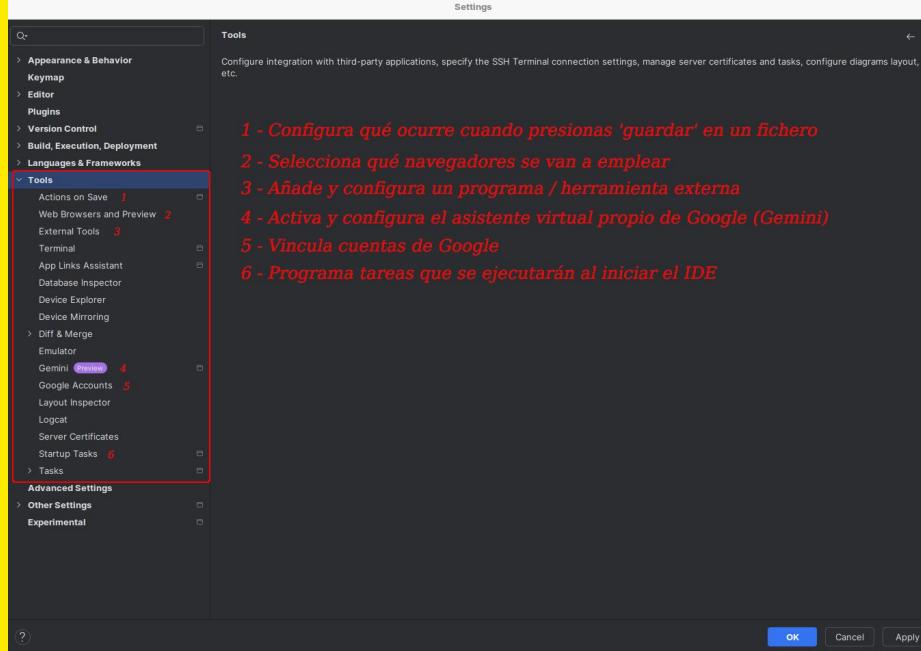
CONFIGURACIÓN DEL IDE

5 - Lenguajes y Frameworks



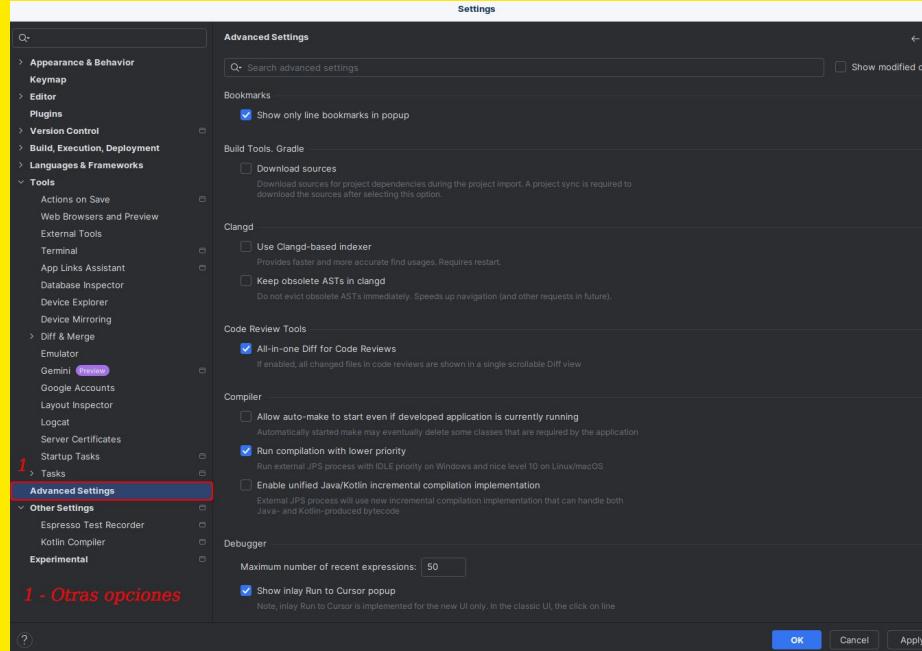
CONFIGURACIÓN DEL IDE

6 - Herramientas (tools)



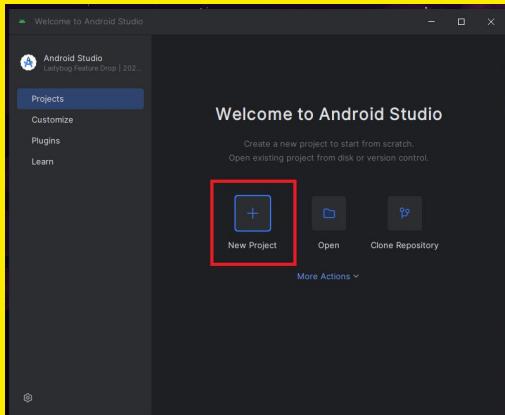
CONFIGURACIÓN DEL IDE

7 - Opciones avanzadas

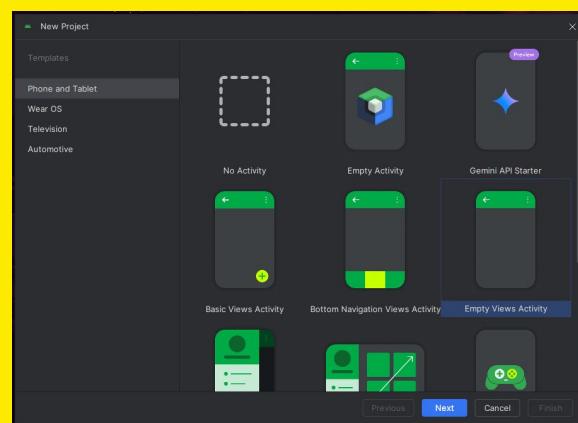


CREACIÓN DE UN PROYECTO EN JAVA

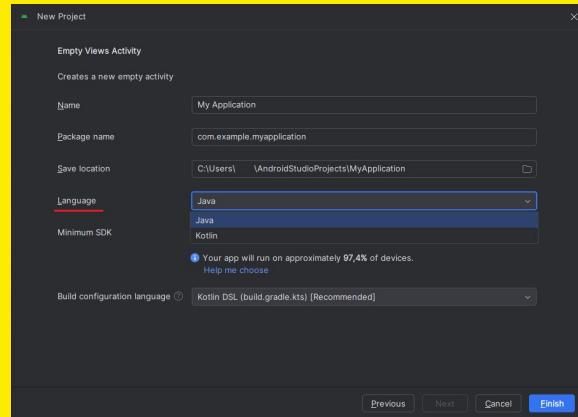
Selección de la plantilla y configuración



1.

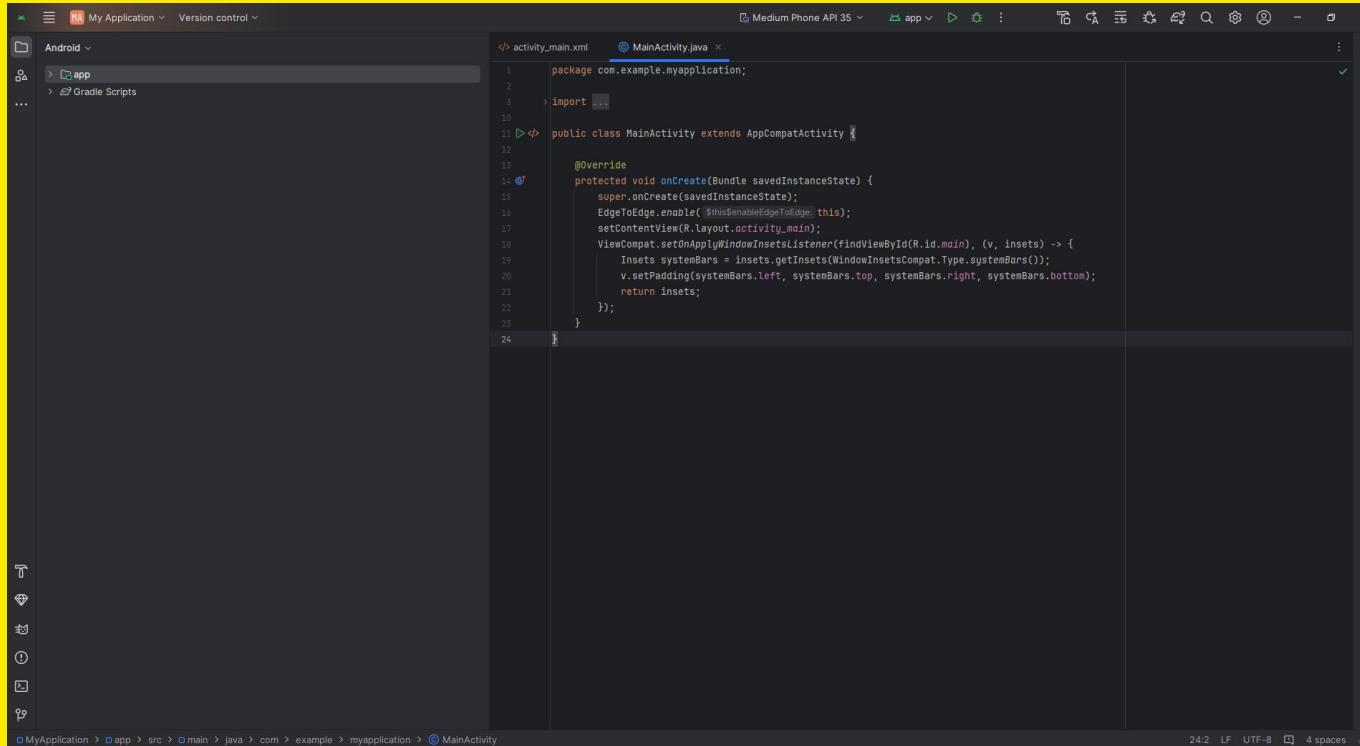


2.



3.

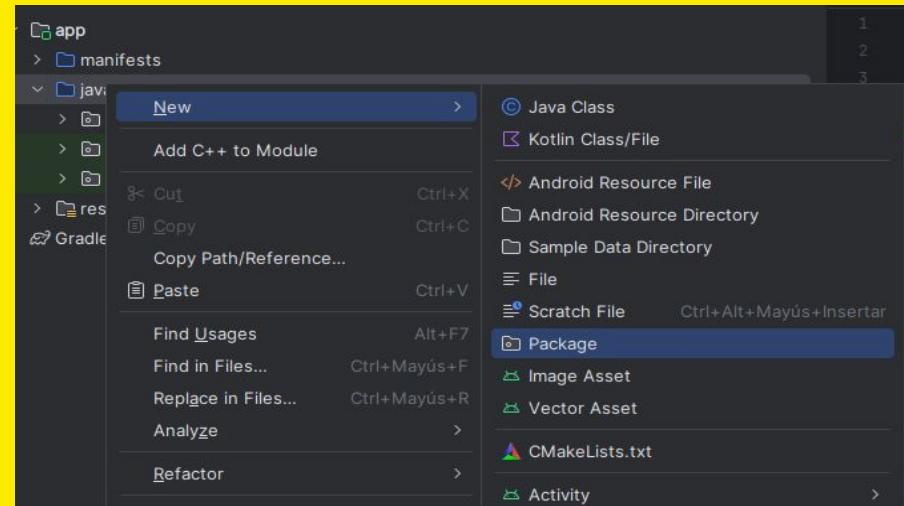
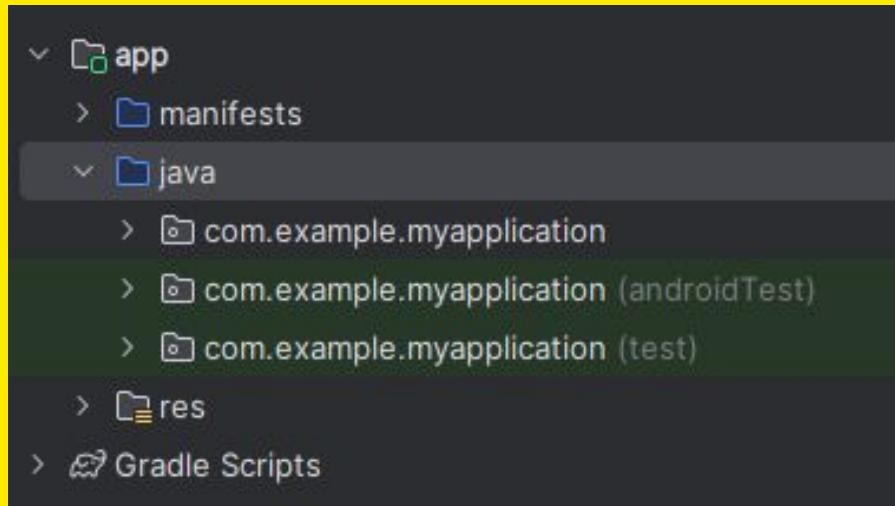
CREACIÓN DE UN PROYECTO EN JAVA



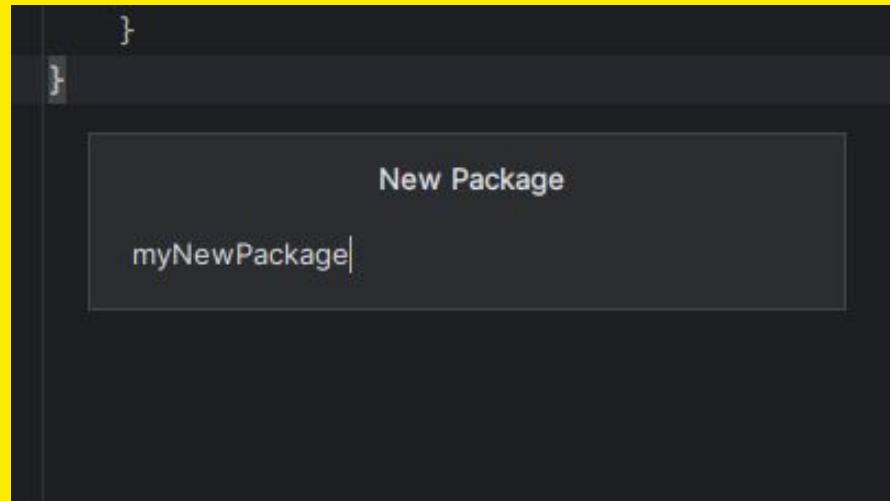
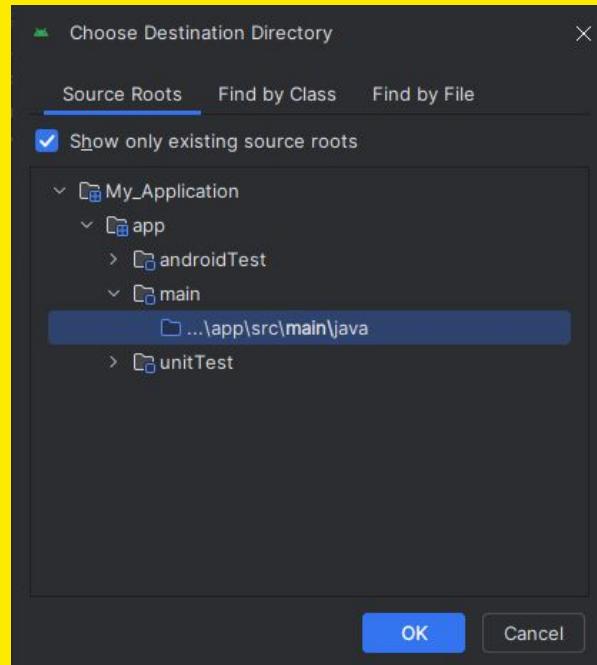
The screenshot shows the Android Studio interface with the project navigation bar at the top. The main area displays the `MainActivity.java` file, which contains Java code for an AppCompatActivity. The code includes an `onCreate` method that sets up a window insets listener to handle edge-to-edge screen features.

```
1 package com.example.myapplication;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10        EdgeToEdge.enable(this);
11        setContentView(R.layout.activity_main);
12        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
13            Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
14            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
15            return insets;
16        });
17    }
18}
```

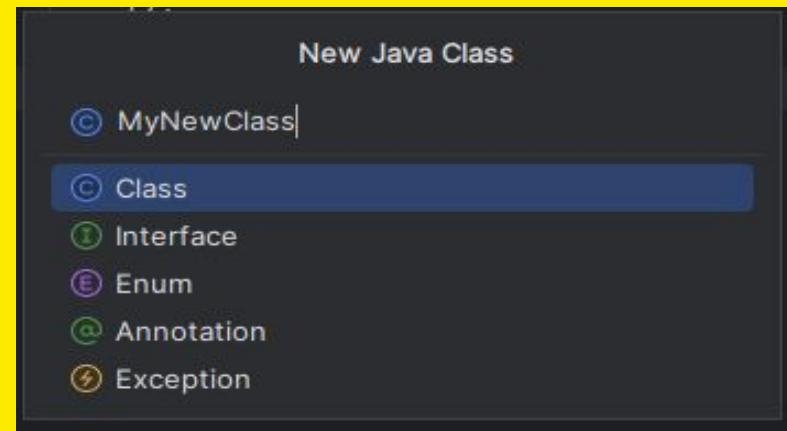
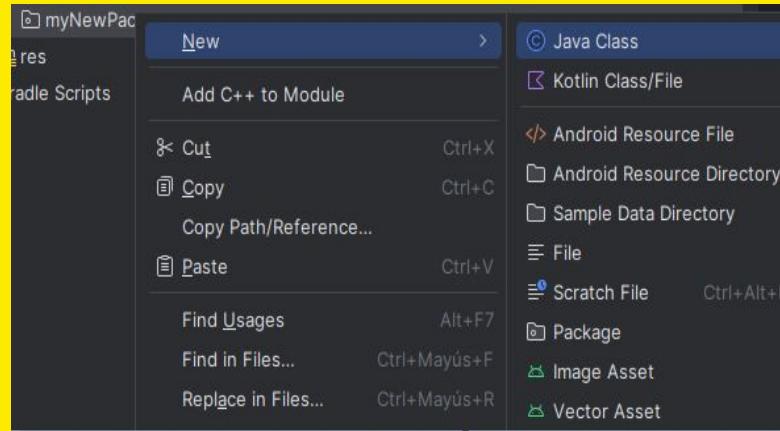
CREACIÓN DE UN PAQUETE EN JAVA



CREACIÓN DE UN PAQUETE EN JAVA

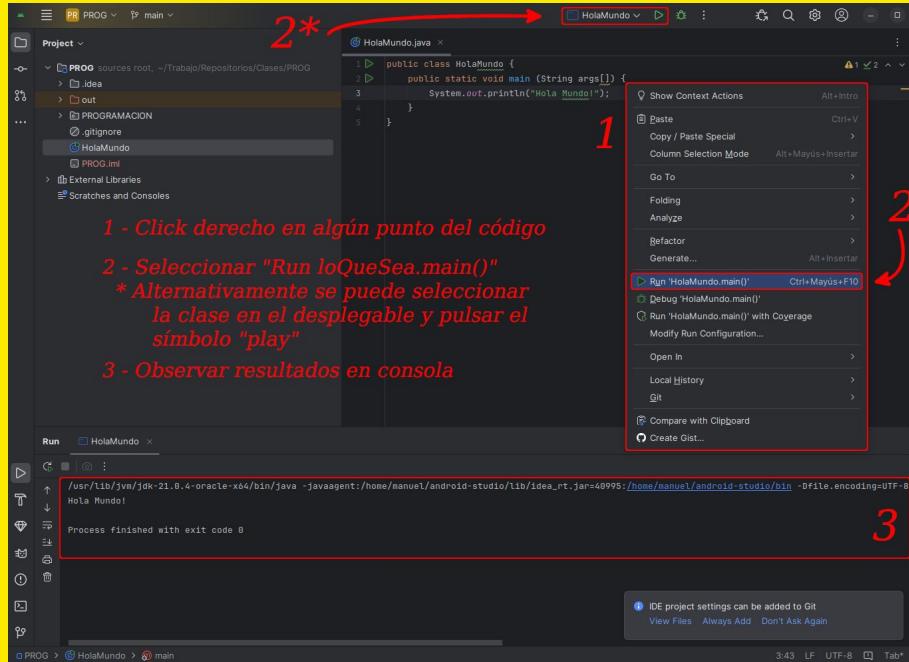


CREACIÓN DE UNA CLASE EN JAVA



Ejecución y depuración del código

1 - Ejecución



Ejecución y depuración del código

2 - Depuración

1 - Seleccionar aquellas líneas en las que se desee detener la ejecución del código

2 - Click derecho en algún punto del código

3 - Seleccionar "Debug loQueSea.main()"
* Alternativamente podríamos hacer click en el ícono de la 'garra'pa'

3* - Click en el ícono de la garra pa en la barra superior.

2 - Context menu opened over the code:

- Copy / Paste Special
- Column Selection Mode
- Go To
- Folding
- Analyze
- Befactor
- Generate...
- Run 'HolaMundo.main()'
- Debug 'HolaMundo.main()'** (highlighted)
- Run 'HolaMundo.main()' with Coverage
- Modify Run Configuration...
- Open In
- Local History
- Git
- Compare with Clipboard
- Create Gist...

Run tab:

- Run HolaMundo
- Logs output:

```
/usr/lib/jvm/jdk-21.0.4-oracle-x64/bin/java -javaagent:/home/manuel/android-studio/lib/idea_rt.jar=40995:/home/manuel/HolaMundo
Process finished with exit code 0
```

1 - Resumir ejecución del código

2 - Por cada pulsación de (1) el código se ejecutará hasta la siguiente línea y las variables irán cambiando (si es que)

3 - Valor que almacenan las variables actualizado por linea

4 - Controles adicionales (detener y resumir ejecución)

Threads & Variables tab:

- args = (String[0]@774) [0]
- variablePrueba = 0
- i = 0

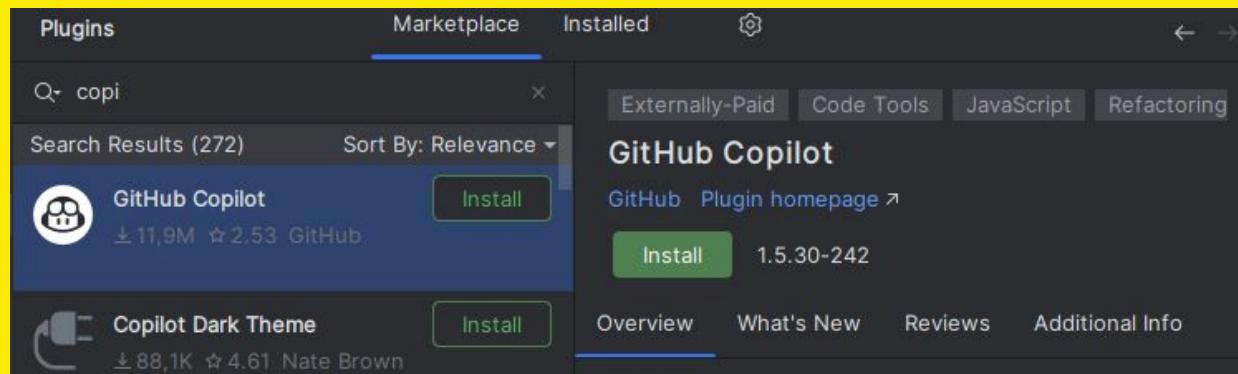
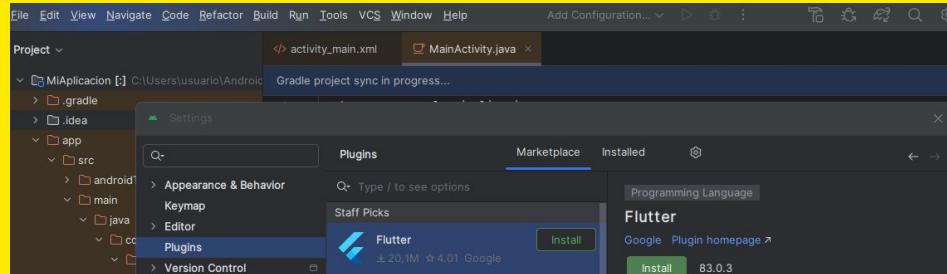
Console tab:

- args = (String[0]@774) [1]
- variablePrueba = 1
- i = 1

Threads tab:

- args = (String[0]@774) [2]
- variablePrueba = 2
- i = 2

2. PROYECTOS Y PLUGINS



3. PROYECTOS Y PLUGINS

The screenshot shows the GitHub Copilot interface integrated into the Android Studio code editor. On the left, there's a sidebar with the GitHub Copilot logo and a welcome message. The main area displays Java code for an Android application, specifically the `MainActivity.java` file. The code implements the `onCreate` method to handle system bar insets. A tooltip from GitHub Copilot provides a detailed explanation of the `onCreate` method and its purpose in the application's lifecycle. Another tooltip below it discusses setting the application theme. The GitHub Copilot interface includes a sidebar with various icons for notifications, issues, pull requests, and other GitHub features.

```
activity_main.xml  MainActivity.java  AndroidManifest.xml

1 package com.example.miaaplicacion;
2
3 > import ...
4
5
6 ></> public class MainActivity extends AppCompatActivity {
7
8     @Override
9     protected void onCreate(Bundle savedInstanceState) {
10         super.onCreate(savedInstanceState);
11         EdgeToEdge.enable( $this$enableEdgeToEdge: this );
12         setContentView(R.layout.activity_main);
13         ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main),
14             Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.sys-
15                 v.setPadding(systemBars.left, systemBars.top, systemBars.right,
16                 return insets;
17             });
18         }
19     }
20 }
```

GitHub Copilot x

Vista principal en función de los bordes del sistema.

Accept solution

activity of the application. It extends the AppCompatActivity class, which is the base class for activities that use the support library.

The onCreate() method is a callback method that is called when the activity is created. It calls the EdgeToEdge.enable() method to

Accept solution

Establecer el tema de la aplicación

Para asegurarse de que la aplicación se vea correctamente en dispositivos con Android 10 (API nivel 29) y versiones posteriores,

3. PROYECTOS Y PLUGINS

Copilot Chat needs additional authorization.

You are logged in, but we need additional authorization to enable Copilot Chat.

Authorize

```
package com.example.miaplicacion;
import ...;

public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.container), new ViewCompat.OnApplyWindowInsetsListener() {
            @Override
            public void onApplyWindowInsets(View v, WindowInsets insets) {
                insets.consumeSystemBars();
                v.setPadding(insets.getSystemBarInsetLeft(), insets.getSystemBarInsetTop(), insets.getSystemBarInsetRight(), insets.getSystemBarInsetBottom());
                return insets;
            }
        });
    }
}
```

GitHub Copilot Chat

Unit Testing MainActivity

CristianRodriguezDAM

expícame como funciona el código de la clase main

GitHub Copilot

5 steps completed successfully

La clase `MainActivity` extiende de `AppCompatActivity` y es la actividad principal de la aplicación. Aquí está el desglose de su funcionamiento:

1. Método `onCreate`:
 - `super.onCreate(savedInstanceState)`: Llama al método `onCreate` de la clase base `AppCompatActivity` para realizar la configuración inicial de la actividad.
 - `EdgeToEdge.enable(this)`: Habilita el modo de pantalla completa sin bordes, utilizando la clase `EdgeToEdge`.
 - `setContentView(R.layout.activity_main)`: Establece el diseño de la actividad utilizando el archivo de diseño `activity_main.xml`.

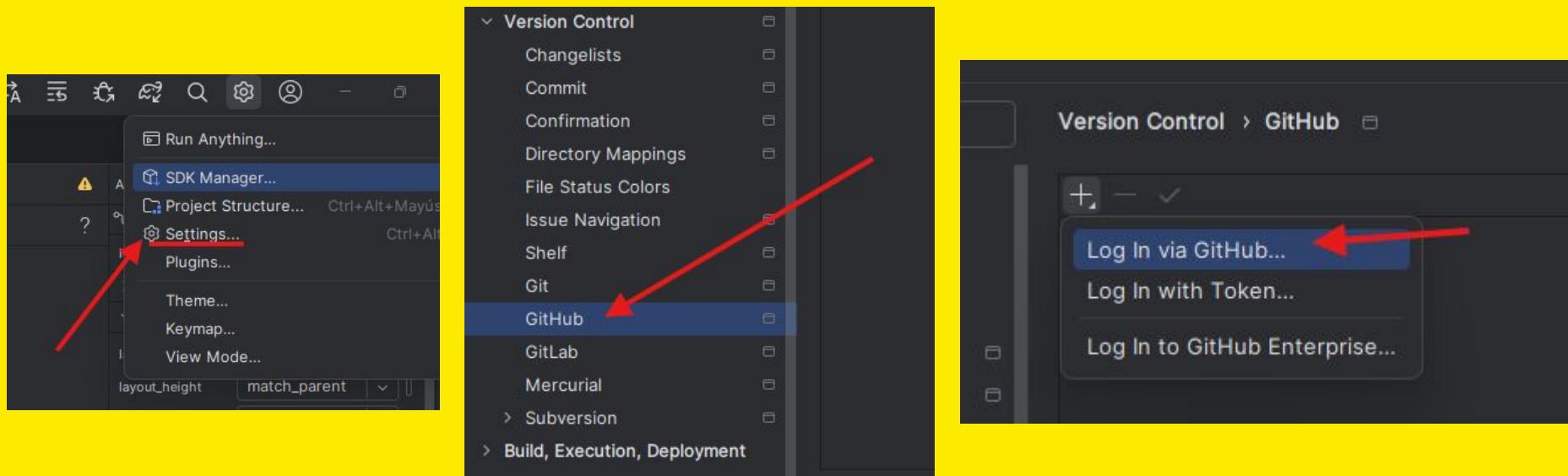
INTEGRACIÓN CON GIT

1 - Control de versiones



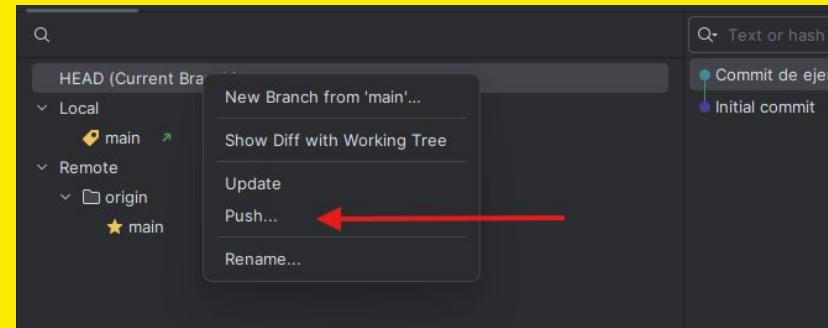
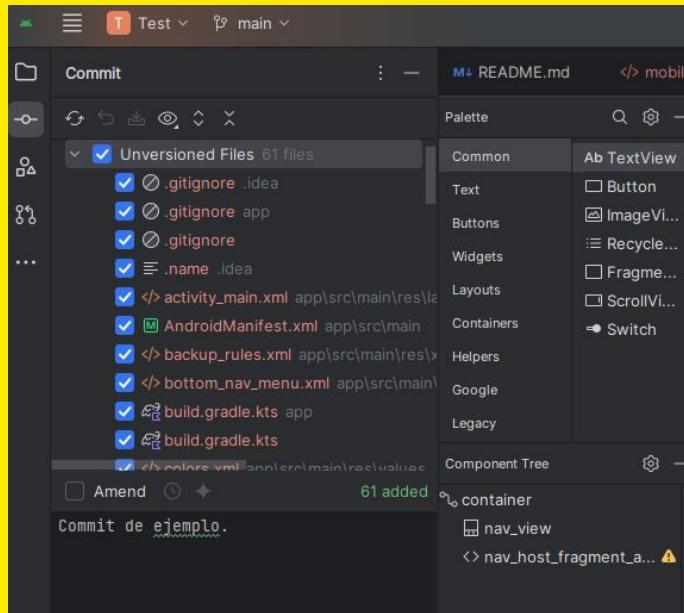
INTEGRACIÓN CON GIT

2 - Iniciar sesión en Github.



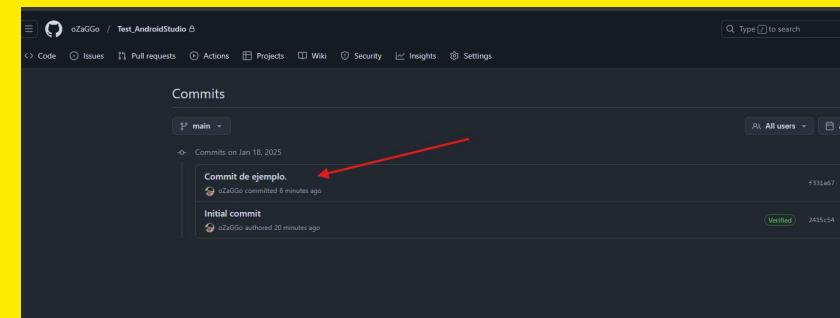
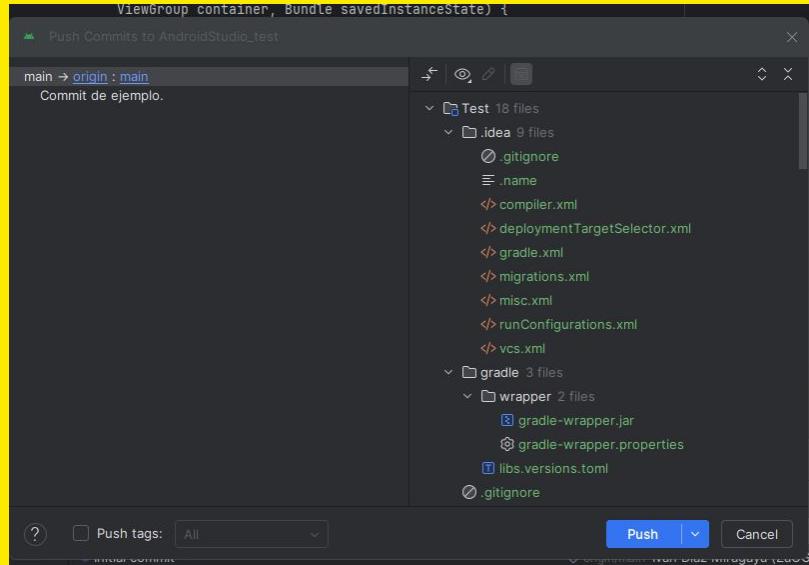
INTEGRACIÓN CON GIT

3 - Herramientas para GIT.



INTEGRACIÓN CON GIT

3 - Herramientas para GIT.



Gracias