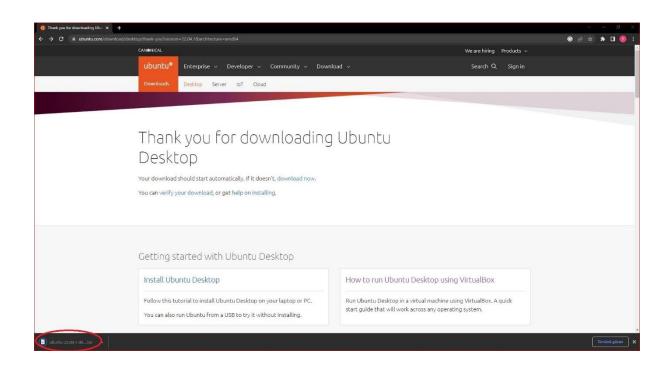
Virtual Box and Ubuntu 22.04 Installation

1- Download the Ubuntu 22.04 image from <u>https://ubuntu.com/download/desktop</u> or from the CrocusPI applications <u>folder</u>.

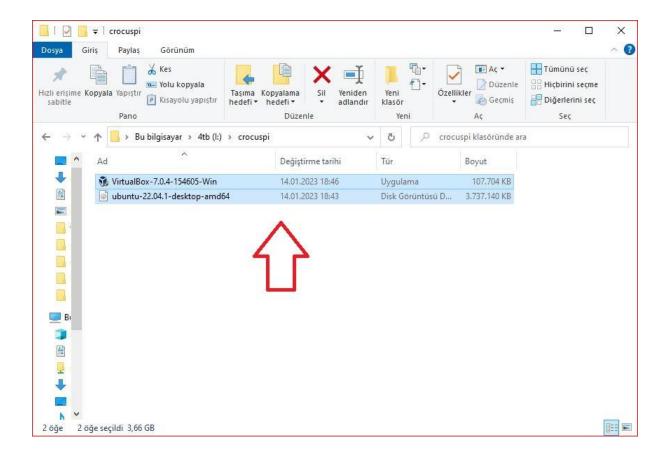
🧕 Download Ubuntu Desktop Do∞ 🗴 🕂	✓ - Ø X
← → C i ubuntu.com/download/desktop	ତ ⊮ ☆ 🖈 🖬 🧐 :
developers and organisations below.	
Ubuntu Desktop homepage Visit the Ubuntu Desktop blog +	
Ubuntu 22.04.1 LTS	
The latest <u>LTS</u> version of Ubuntu, for desktop PCs and laptops. LTS stand support — which means five years of free security and maintenance upd until April 2027.	
Ubuntu 22.04 LTS release notes	
Recommended system requirements:	Download
 2 GHz dual-core processor or better Internet access 	s is helpful For other versions of Ubuntu Desktop including
 4 GB system memory Either a DVD dr 	rive or a USB port for the torrents, the network installer, a list of local mirrors and
25 GB of free hard drive space installer media	past releases see our alternative downloads.
Ubuntu 22.10	×
The latest version of the Ubuntu operating system for desktop PCs and 22.10 comes with nine months of security and maintenance updates, un	





2- Download Oracle Virtual Box 7.0 software from <u>https://www.virtualbox.org/wiki/Downloads</u> or from the CrocusPI applications <u>folder</u>

Downloads - Oracle V	MVetuali x +	× – a ×
	ualbez.org/wik/Downloads	S 🖻 🖈 🖪 🥘 i
	VirtualBox Download VirtualBox Here you will find links to VirtualBox VirtualBox binaries	search Login Preferences
About Screenshots	VITUALIDOA Unitarios By downloadina, you agree to the terms and conditions of the respective license.	
Downloads	ey dominadung, you agree to uie ternis and conductios on uie respective activities and exclusion and conduction on uie respective activities and conduction on uie respective activities and conductivities	
Documentation End-user docs Trechnical docs Contribute Community	VirtualBox 7.0.4 platform packages • "Windows name • "Boundogs international packages • "Boundogs international packages • "Boundogs international packages • Boundogs intentational packages aboves	ersonal Use and Evaluation
	VirtualBox older builds	*
ubuntu-22.04.1-de.		Türmünü göster 🛛 🗙





3- Virtual Box 'ı kurun.



Yüklenmesini istediğ	jiniz özellikler için yolu seçin.	
Yüklenecek özellikle	rin yolunu değiştirmek için aşı	ağıda ağaçtaki simgelere tiklayın.
EVirl	ualBox Application	Oracle VM VirtualBox 7.0.4 uygulaması.
		ayguanasi.
	VirtualBox Bridge	Bu ozellik sabit surucupuzde 209MB
	· VirtualBox Host-C	gerekurir, seçil si salt üzellige
<	· · · ·	sürücünüzde 1000KB gerektirir.
Konum: C:\Pr	ogram Files\Oracle\VirtualBo>	Gözat



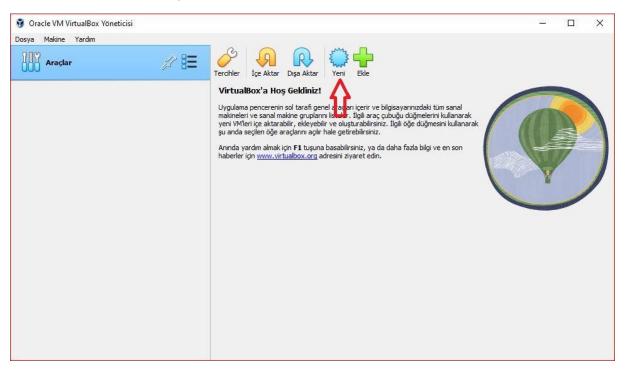


🛃 Oracle VM VirtualBox 7.0.4 Ku	ır X
Yüklemek için hazır	
Kur Sihirbazı, Özel kuruluma baş	lamak için hazır.
	tıklayın. Eğer herhangi bir kurulum ayarınızı gözden orsanız, Geri'ye tıklayın. Sihirbazdan çıkmak için İptal'e
	Ŷ
Version 7.0.4	< Geri Yükle İptal

🖟 Oracle VM VirtualBox 7.0.4	4 Kur	84 <u>-</u> 58	
Oracle VM VirtualBox 7.0	1.4		
Kur <mark>Sihirbazı, Oracle V</mark> M \	/irtualBox 7.0.4 uygulamasını yü	üklerken lütfen bek	de <mark>yin. Bu</mark>
birkaç dakika alabilir. Status:			
Version 7.0.4	< Geri	İleri >	İptal



4- Click "New" to set up a new virtual machine.



5- Add the downloaded Ubuntu image as ISO image. Check "Skip unattended installation".

🗿 Sanal Makine Oluştur		?	×
V Ad ve	İşletim Sistemi		
Ad:	ubuntu_64		
Klasör:	C:\Users\compxx\VirtualBox VMs		~
ISO Kalibi:	📄 I:\crocuspi\ubuntu-22.04.1-desktop-amd64.iso		~
Düzenleme:			~
Tür:	Linux	~	1
Sürüm:	Ubuntu (64-bit)	~	
	🗹 Katılımsız Kurulumu atla <		
> Katilim	siz Yükle		
> Donar	im and a second s		
> Sabit I	Disk		
Yardım	Rehberli Kip Geri Bitir	İpt	al

6- Adjust the memory and processor settings according to your computer hardware in the Hardware section.

Sanal Makine Oluştur			? >
	> Ad ve İşletim Sistemi		
	📏 Katilimsiz Yükle		
-	V Donanim		
A Same	Ana Bellek:	U	8092 MB 🖨
	4 MB	an a tan bar bar tan at tan <mark>bar</mark>	16384 MB
	İşlemciler:		
	1 İşlemci		24 İşlemci
1	🔲 EFI etkinleştir (yalnızca özel İS'leri)		

7- Adjust the Hard Disk size and start the system with "Finish".

🗿 Sanal Makine Oluştur	3	r ×
	> Ad ve İşletim Sistemi	
	> Katilimsiz Yukle	
- March	> Donanim	
	Sabit Disk	
	Simdi Sanal Bir Sabit Disk Oluştur	
-	Sabit Disk Dosya Konumu ve Boyutu	
	C:\Users\compxx\VirtualBox VMs\ubuntu_64\ubuntu_64.vdi	
	4,00 MB 2,00 TB	00 GB
	Sabit Disk Dosya Türü ve Çeşidi VDI (VirtualBox Disk Kalibi)	
	Tam Boyutu önceden ayır	
	2GB'lik parçalara böl	
	🔿 Varolan Sanal Bir Sabit Disk Dosyası Kullan	
	Boş	~ 🖾
	O Sanal Bir Sabit Disk Ekleme	
	小	
Yardım	Rehberli Kip Geri Bitir	İptal

8- Select Installation in Ubuntu startup options.

🜠 ubuntu_64 [Çalışıyor] - Oracle VM VirtualBox	– 🗆 X
Dosya Makine Görünüm Giriş Aygıtlar Yardım	
GNU GRUB version 2.06	Klavyeyi otomatik yakala 🔯 😫
*Try or Install Ubuntu Ubuntu (safe graphics) OEM install (for manufacturers) Test memory	
Use the ↑ and ↓ keys to select which entry is hig Press enter to boot the selected OS, `e' to edit + before booting or `c' for a command-line. The highlighted entry will be executed automatically	the commands

	Çalışıyor] - Oracle VM VirtualBox Görünüm Giriş Aygıtlar Yard			×
Dosya Makire	Gorunum Ginş Aygıdar Taru	nn,		
-				
		Jan 14 21:40 👗 🐠 🕛		
		Install		
	Welcome			
	English			
	Español			
	Esperanto Euskara			
	Français			
	Gaeilge			
	Galego			
	Hrvatski			
	Íslenska			
	Italiano Kurdî	Try Ubuntu Install Ubuntu		
	Latviski			
	Lietuviškai	You can try Ubuntu without making any changes to your computer, directly from this CD.		
	Magyar			
	Nederlands	Or if you're ready, you can install Ubuntu alongside (or instead of) your current operating system. This shouldn't take too long.		
	No localization (UTF-8)			
	Norsk bokmål Norsk pyporsk	You may wish to read the release notes.		
			Right C	ontrol

9- Choose your keyboard layout.

	Jan 14 21:40 📥 🐠 🖱	
	Install	×
Keyboard layout		
Choose your keyboard layout:		
English (Australian) English (Cameroon) English (Chana) English (Nigeria) English (South Africa) English (UK) English (UK) Esperanto Estonian Faroese Filipino Finnish French	English (US) English (US) - Cherokee English (US) - English (Colemak) English (US) - English (Colemak-DH ISO) English (US) - English (Colemak-DH) English (US) - English (Dvorak) English (US) - English (Dvorak, alt. intl.) English (US) - English (Dvorak, alt. intl., with dead keys) English (US) - English (Dvorak, intl., with dead keys) English (US) - English (Dvorak, left-handed) English (US) - English (Dvorak, left-handed) English (US) - English (Dvorak, right-handed) English (US) - English (Macintosh) English (US) - English (US, Symbolic) English (US) - English (US, Symbolic)	
Type here to test your keyboard		
Detect Keyboard Layout	心	

🛃 ubuntu_64	Çalışıyor] - Oracle VM VirtualBox	m		×
Dosya Makine	Görünüm Giriş Aygıtlar Yardım			
-	Jan 14 21:41 📇	⊕ (b)		
	546 - 567 - 567 - 577 -	,» O		
	Install	×		
	Updates and other software			
	What apps would you like to install to start with?			
	Normal installation			
	Web browser, utilities, office software, games, and media players. O Minimal installation			
	Web browser and basic utilities.			
	Other options			
	Download updates while installing Ubuntu			
	This saves time after installation.			
	Install third-party software for graphics and Wi-Fi hardware and additional media formats			
	This software is subject to license terms included with its documentation. Some is proprietary.			
	t t			
	Ouit Back Contin	IIE		
		0 🛇 💽	Right C	ontrol 🔐
Juhuntu 641	Çalışıyor] - Oracle VM VirtualBox			×
	Görünüm Giriş Aygıtlar Yardım			~
	Jan 14 21:41 🔒	() ()		
	Install	×	1	
-				
	Installation type			
	This computer currently has no detected operating systems. What would you like to do?			
	Erase disk and install Ubuntu Warning: This will delete all your programs, documents, photos, music, and any other files in all operating systems.			
	Advanced features None selected			
	Something else You can create or resize partitions yourself, or choose multiple partitions for Ubuntu.			
	rod can create or resize partitions yourself, or choose multiple partitions for obunity.			
	٠.	7		
	Ouit Back Install N	OW		
		100		
		631 49 (-	0.110	ontrol

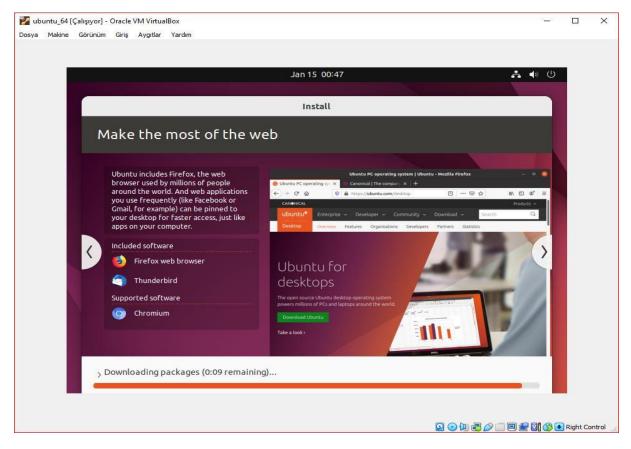
untu_64 [Çalışıyor] - Oracle VM VirtualBox	<u>_</u> 11		×
Makine Görünüm Giriş Aygıtlar Yardım			
	- ZIN		
Jan 14 21:41	» O		
Installation type			
This computer currently has no detected operating systems. What would you like to do?			
O Erase disk and install Ubuntu			
Warning: This will delete all your programs, documents, photos, music, and any other files in all operating systems. Advanced features None selected			
Write the changes to disks?			
If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.			
The partition tables of the following devices are changed:			
SCSI3 (0,0,0) (sda) The following partitions are going to be formatted:			
partition #2 of SCSI3 (0,0,0) (sda) as ESP partition #3 of SCSI3 (0,0,0) (sda) as ext4			
Go Back Continue			
Back			
	3 🛇 💽	Right Co	ontro
untu_64 [Çalışıyor] - Oracle VM VirtualBox	<u> 11</u> 11		>
Makine Görünüm Giriş Aygıtlar Yardım			
Jan 14 21:42) U		
Where are you?			
	. <		
	X		
그는 것 이 이 옷 뜻가에 집에 넣 독일에서 이 관계들었다.			
	at a		
Istanbul			
Back Continu	IP		



10- Set your computer name, username and password.

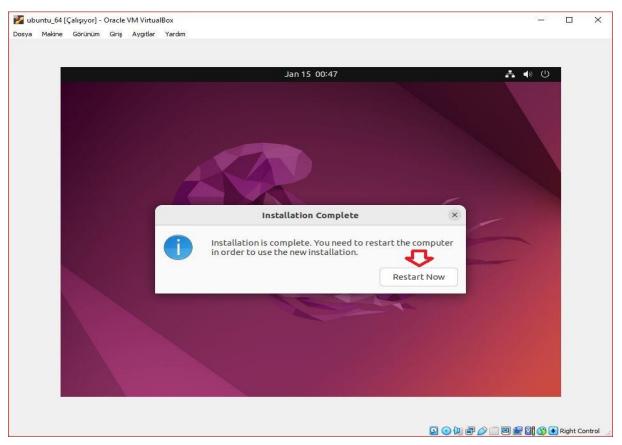
🛃 ubuntu_64 [Çalışıyor] - Oracle VM VirtualBox Dosya Makine Görünüm Giriş Aygıtlar Yardım			×
Dosya Makine Gorunum Giriş Aygıdar tardım			
	Jan 15 00:43 🏯 📣 🕛		
	Install		
Who are you?			
Your nam	e: ubuntu		
Your computer's nam			
Pick a usernam	The name it uses when it talks to other computers. e: ubuntu		
Choose a passwor	d: 💿 Short password		
Confirm your passwor	d: 🐽 🖉 🖉		
	O Log in automatically		
	Require my password to log in		
	Use Active Directory You'll enter domain and other details in the next step.		
	Ω.		
	Back Continue		
	Q @ U Z	Right Co	ontrol _{di}

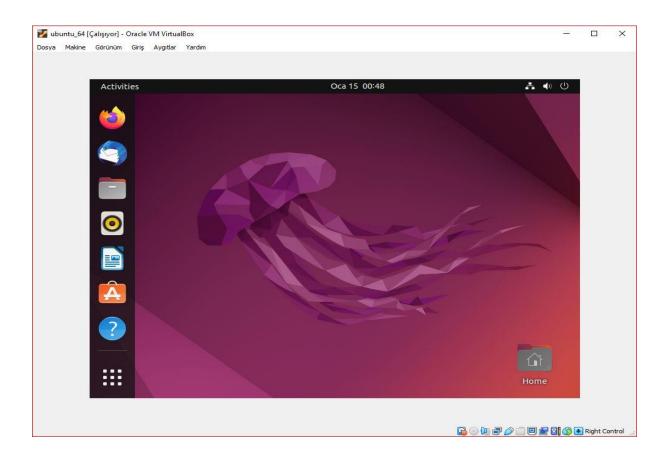
11- Wait for the installation to complete.



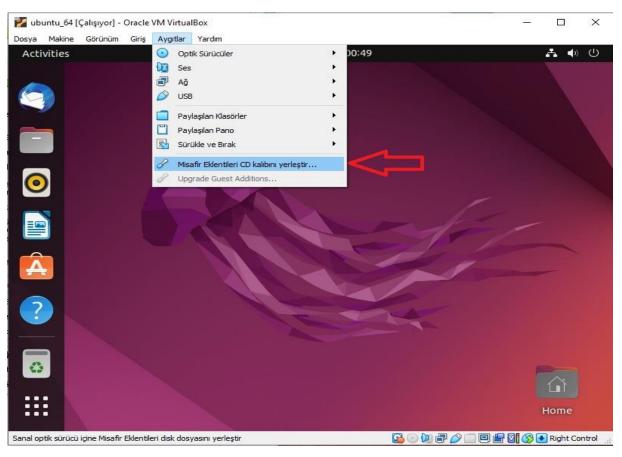






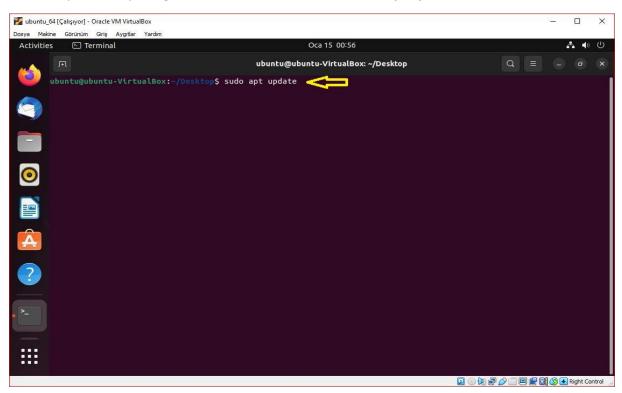






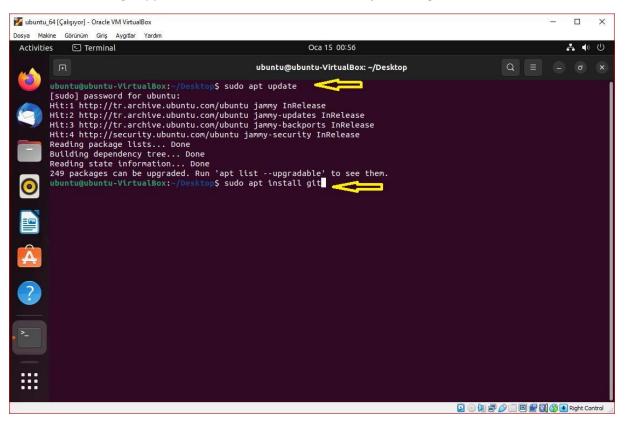
13- Perform the installation of guest addons. The installation will be completed with this process.

14- Update the package installer with the command "sudo apt update".

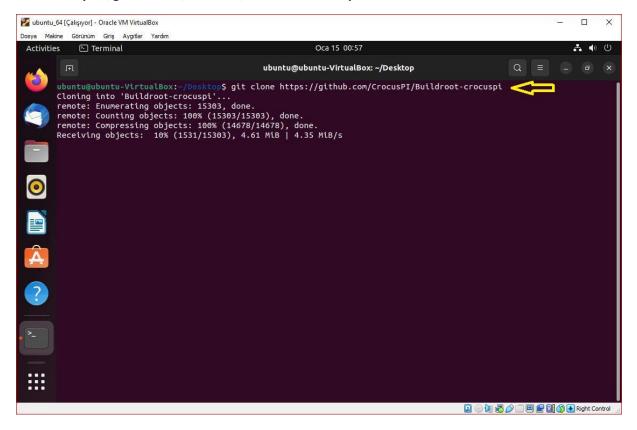




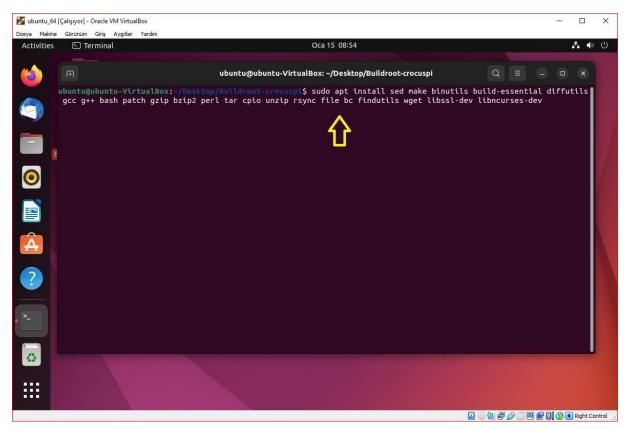
15- Install the git application with the command "sudo apt install git".



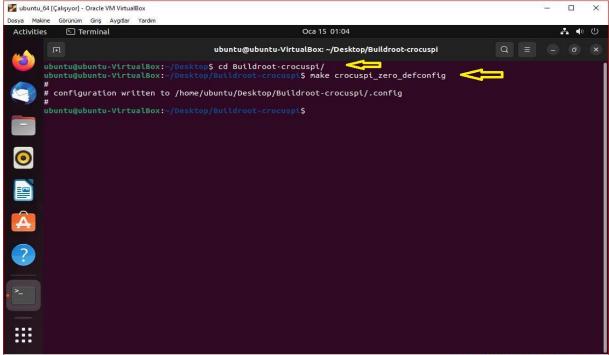
16- Clone the github repository to your computer with the command "git clone https://github.com/CrocusPI/Buildroot-crocuspi".



17- Install the necessary applications for compilation processes with the command "sudo apt install sed make binutils build-essential diffutils gcc g++ bash patch gzip bzip2 perl tar cpio unzip rsync file bc findutils wget libssl-dev libncurses-dev".

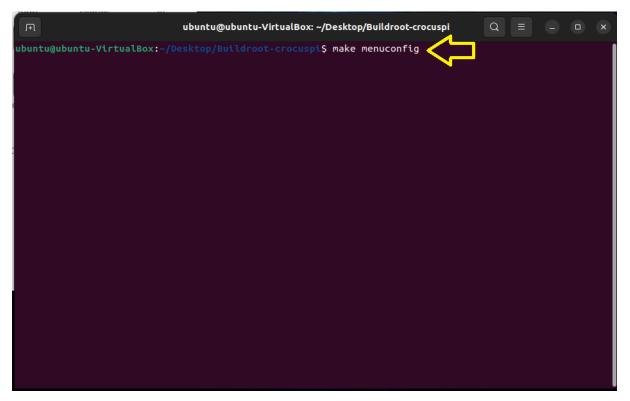


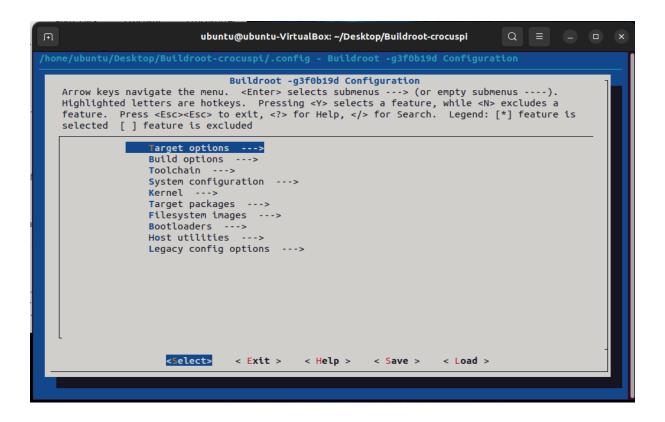
18- In the Buildroot folder, load the crocuspi settings with the "make crocuspi_zero_defconfig" command.



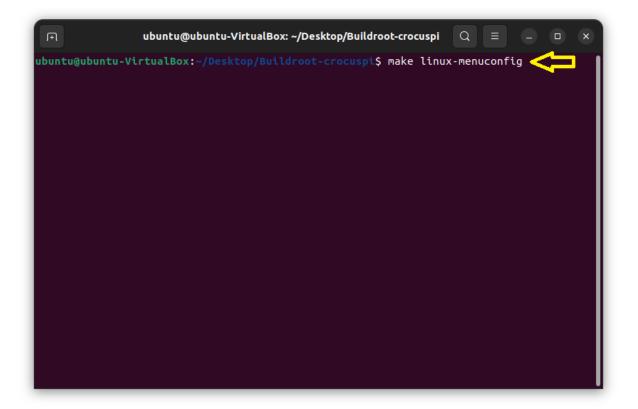
😰 💿 💯 🗬 🤌 🛄 🖳 🚰 🔯 🚫 💽 Right Control

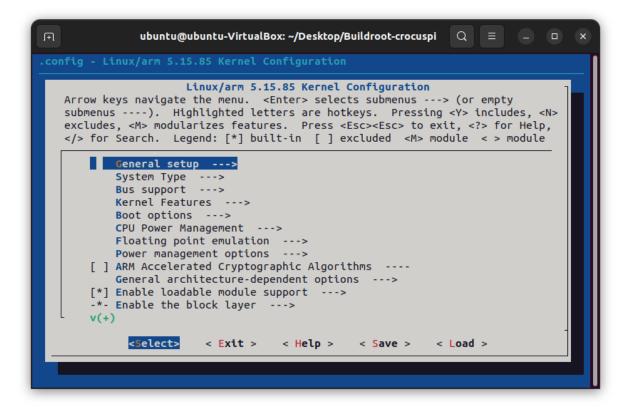
19- **Customize** the **buildroot** packages with the "**make menuconfig**" command. You can add or remove applications you want.



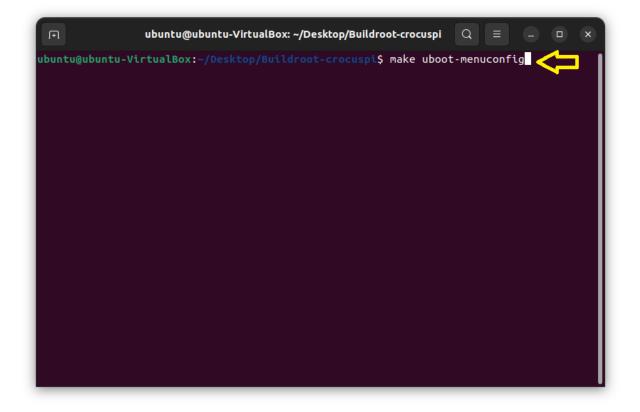


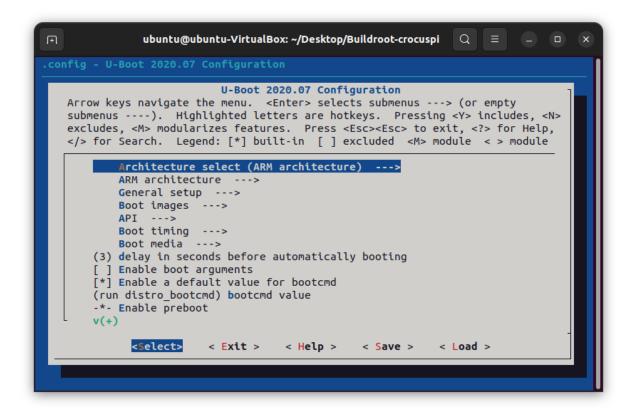
20- Customize the Linux Kernel with the "make linux-menuconfig" command.



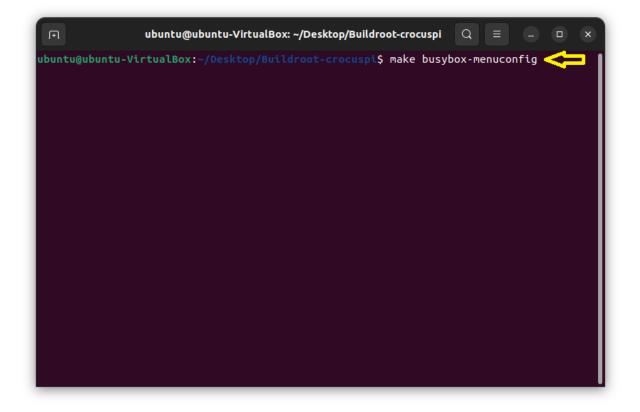


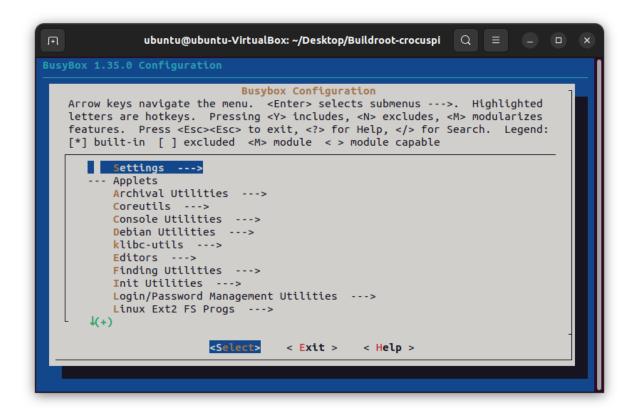
21- Customize the Uboot with the "make uboot-menuconfig " command.



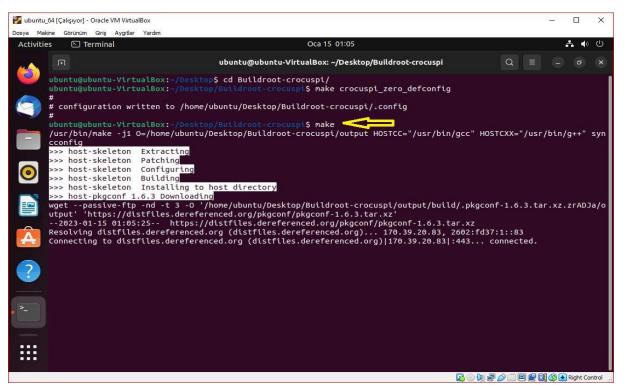


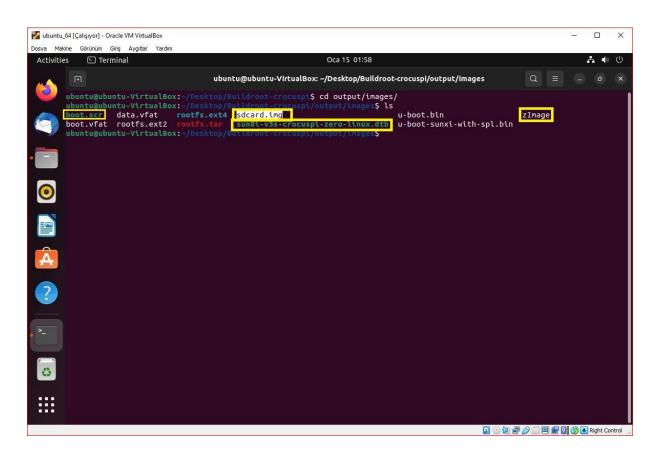
22- Customize the Busybox with the "make busybox -menuconfig" command.





23- Start the compilation process with the command "make" or "make -j\$(nproc)".





24- After the compilation process is completed, the necessary files will be created in the "output/images" folder. You can download the image file to your microSD card and run CrocusPI Zero.

