

XI’AN JIAOTONG-LIVERPOOL UNIVERSITY

## HAPPY LEC GRADUATION

LINUX MAKES YOUR LIFE EASIER CLUB

**LEC Graduation Task Sheet**

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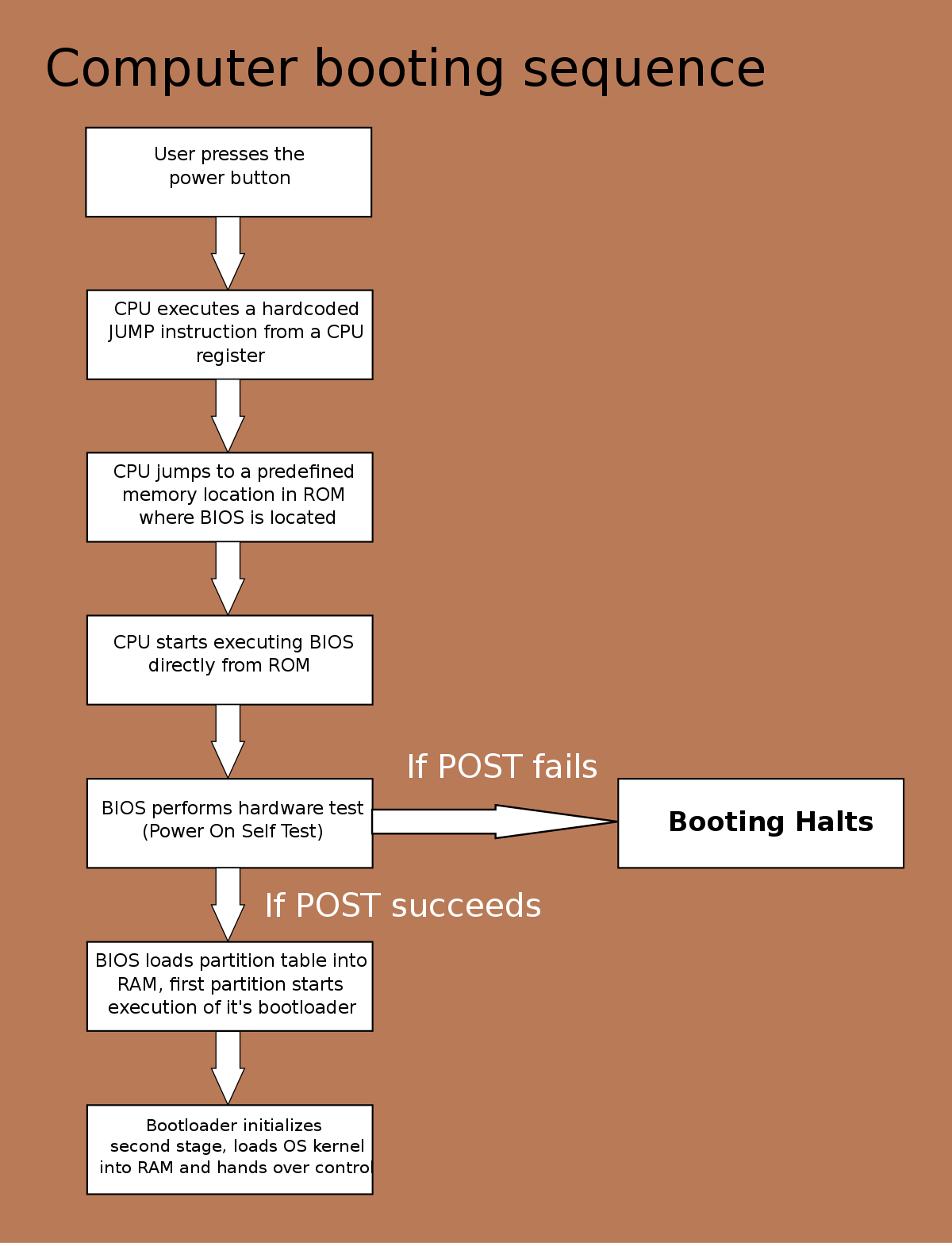
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**Chapter 1**

**Linux Basics**

# Boot Sequence



**Figure 1.1:** Computer boot sequence

1. **Briefly describe the process of the computer booting.**

计算机启动就是通过硬件的按钮启动计算机的过程，加载软件到计算机内存里。

1. **If there are two systems in a computer, at which step you will select the system to enter.**

在微软系统里安装双系统后，会在开始菜单选择系统

1. **If you are installing a dual system, the bootloader is a problem. You are likely to have problems with the original system being overwritten (the whole system is overwritten or the system exists but there is no entry). How would you deal with this or how many ways do you have, to deal with the bootloader?**

当我安装了双系统，运行加载的确会成为一个问题。但是可以在安装乌班图系统后，在bios系统内disable开机功能，小新在开机时候按住fn+f12，进入biso系统改动控制器按钮器enable为disable就可。

*2. Basic Commands Chapter 1. Linux Basics*

# Basic Commands

1. **Which two directories are exist in every directory?**

哪两个文件夹存在每一个文件夹，’.’和’..’都存在，一个是现在的文件夹，一个是上一个父文件夹

1. **How do you jump to the previous level of the directory?**

Cd ./

1. **How can you jump between two directories without typing the path?**

Cd – 来回切换

1. **What is a "hidden file" or "hidden directory"? How to find them?**

隐藏文件和隐藏文件夹是以”.”存在，ls -a一下可以显示文件夹下的隐藏文件

1. **How can you know the permissions of a directory or file?**

简单的‘ll’

1. **What should you do when there is a "permission denied"?**

Chmod 加个权限

1. **How to add an execution permission to the current user?**

Sudo chmod -R 777

1. **What is SHELL? What does it do? (Hint: The Onion Chart)**

Shell是一个用c语言编写的程序，它既是一种命令语言也是一种应用程序，用户可以通过shell交互实现对界面访问操作系统内核的服务。

1. **What are the three common types of SHELL?**

应该是Bourne shell sh,Korn shell ksh , Bourne Again shell(bash)

1. **If you are using Bash, what is its configuration file?**

配置文件在.bashrc,存储在./basrc

1. **How to a add environment variable? How can we print it?**

如果需要添加环境变量，比如Name,可以使用export NAME = Ney，要打印环境变量的话可以使用echo命令，并在变量名前加上$符号，比如 echo $NAME

1. **If type “export NAME=Rey”, is this environment variable a permanent variable? How to make it persistent?**

不是永久的，需要在shell配置文件里配置下，在bashrc

1. **How to do something automatically every time you open the terminal? For example, let the cow say “hello".**

可以在bashrc文件里配置相关文件，配置cowsay hello文件，前提是得安装cowsay、

1. **How to check your IP address?**

Ip addr show,关键词可以来显示id

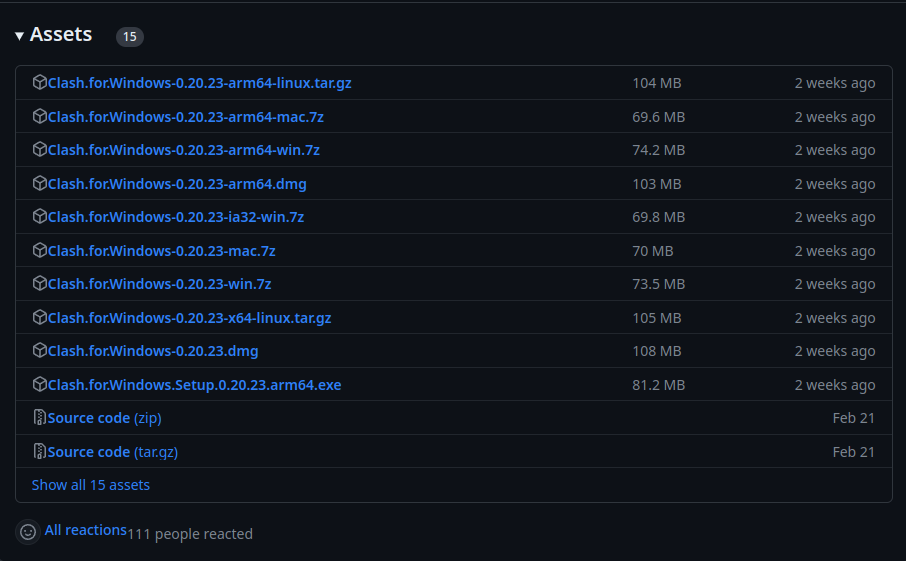
*3. VPN matters Chapter 1. Linux Basics*

# VPN matters

1. **What is “Windows for Clash", is it something only for WindowsOS?**

Clash for windows 是目前在Windows上最好用的图像化分支，通过clash API来配置和控制clash 核心程序

1. **If you’re a LINUX user, which package you should download? How about MAC user and Jetson Nano user?**

根据后缀的名字的不同来下载适配不同操作系统的clash文件。

**Figure 1.2:** Clash for Windows (CFW)

1. **If you already started a proxy server via CFW and its port is 7890. How to make your Firefox use it?**

在火狐浏览器里设置里更改配置选项，主要是把端口设置成7890.

1. **Again, how to make your terminal use it?**

在后台里，使用一下命令：export http\_proxy=http://username:password@localhost:7890

1. **If your IP is accessible for others, is it possible for someone else to use your VPN? How can they use it?**

不能直接使用我的VPN，这需要VPN的服务器地址。

1. **BIG QUESTION!!!! How to use VPN in your WindowsOS computer (take windows ter- minal(a software) as an example.**

使用Shadowrocket VPN

*4. Conda matters Chapter 1. Linux Basics*

# Conda matters

1. **How to install Conda? How many ways you can do it? LINUX and WindowsOS.**

在官网上下载conda，随后将环境变量通过电脑属性添加到环境变量里

1. **Will you use the "base" environment that comes with conda directly? What would be the problem?**

不推荐，更推荐的是自己创建一个环境，因为使用基础环境会出现难以管理配置文件以及会有一潜在的环境失控的问题

1. **How to create a new Conda environment with a specific Python version?**

Conda create –name myEnvironment python==3.86

1. **How to list all existing Conda environments**

Conda env list

Conda info --envs

1. **How to enter a specific Conda environment every time you open a terminal?**

Conda activate myEnvironment

1. **What are the guidelines (recommended practices) for Python package management?**

比如1.使用虚拟环境来隔离python环境，在运行的虚拟环境里可以下载所需要的依赖项，使用conda等工具来管理虚拟环境

2.创建一个Requirements.txt的文件来列出这项目所依赖的所有包以及各自所需要的版本，并且定期的通过指令 pip install --upgrade 和conda update --all

*5. VIM matters (YYDS) Chapter 1. Linux Basics*

# VIM matters (YYDS)

1. **How exit vim?**

有三种 q,q!,wq

1. **How to move in vim?**

H是向左移动，j是往下移动，k是向上移动，l是向右移动

1. **How to write something in vim? Enter insert mode?**

I 是编辑要输入的案件

1. **How to jump to the first line of a file? What about jump to the end of a file?**

gg 是第一条，大写的G是最后一个

1. **How to Delete a word? How to Change a word? What the difference here?**

“dw” delete word and “cw” change a word,区别就是是否会再次进入写入模式

1. **How to Delete a whole line?**

小写“dd”是删除整条行的东西

1. **How to make a file empty? (Delete all lines)**

啥意思，空文件？直接删除,大写D

1. **How to copy something? (Yank)**

“yy”是复制，“p”是粘贴

1. **How to select a specific block of a file and copy them?**

没太懂这是啥意思

1. **When you do something wrong, what you should do?**

撤回“u“

1. **Oh, god. In fact, you were right, how do you undo what you just did?**

Control r

1. **You’ll practice Vim and love it, right?**

Sure，maybe

**Chapter 2**

**Latex Basics**

# Commands

1. How to create **bold** font? (Answer LaTex commands and its shortcut keys)

要在 LaTeX 中创建粗体字体，您可以使用 \\textbf{} 命令。例如，要使单词“bold”以粗体显示，您可以使用 \\textbf{bold}。您还可以结合使用 \\textbf{} 和 \\textit{} 命令来获得斜体和粗体文本。例如，\\textit{\\textbf{bold}} 会产生斜体和粗体文本。

1. How to create **underline** font? (Answer LaTex commands)

在LaTeX中，可以使用`\\underline{}`命令来创建下划线字体。例如，要使单词“underline”出现下划线字体，您可以使用`\\underline{underline}`。您还可以将`\\underline{}`和其他命令（如`\\textbf{}`和`\\textit{}`）结合使用，以获得粗体、斜体和下划线文本。例如，`\\textit{\\textbf{\\underline{underline}}}`将生成斜体、粗体和下划线文本。

1. How to create **italicised** font? (Answer LaTex commands and its shortcut keys)

在LaTeX中，可以使用`\\textit{}`命令来创建斜体字体。例如，要使单词“italic”出现斜体字体，您可以使用`\\textit{italic}`。您还可以将`\\textit{}`和其他命令（如`\\textbf{}`和`\\underline{}`）结合使用，以获得粗体、斜体和下划线文本。例如，`\\textit{\\textbf{\\underline{italic}}}`将生成斜体、粗体和下划线文本。

1. How do you insert a mathematical formula in LaTeX?

、$..$

1. How do you create an ordered list in LaTeX?

\begin{enumerate}

\end{enumerate}

1. How do you insert an image in LaTeX?

\usepackage{graphic}

\includegraphics[]{image\_filename}

1. How do you set the page margins in LaTeX?

\usepackage{geometry}

1. How do you create a table with multiple columns in LaTeX?

\begin{tabular}

\end{tabular}

1. How do you create a new chapter in LaTeX?

\section{}

1. How do you use citations and create a bibliography list in LaTeX?

\cite{}

\printbibliography

1. How do you change the font size and color in LaTeX?

更改字体大小和颜色，可以使用[\\tiny,\\small,\\large](file:///\\tiny,\\small,\\large)也可以使用\\fontsize{size}自定义更改大小，而更改颜色的话需要添加xcolor包，\usepackage{xcolor},比如用\textcolor{color}{text}来更改字体颜色

1. How do you insert a footnote in LaTeX?

\footnote{}

1. How do you create a multi-level list in LaTeX?

\begin{enumerate}

\item

\begin{enumerate}

\item{}

\end{enumerate}

\end{enumerate}

# Sort the following hierarchical concepts from highest to low- est

2.section 5.paragraph 3.subsection 1.chapter 4.subsubsection

# Multiple choice

* 1. You are to write a DTSxxxTC coursework, which of the following editor is your top priority?

A. WPS Word B. Latex C. Memorandum D. .txt

1. *Multiple choice Chapter 2. Latex Basics*
   1. To add a mathematical formula in your DTSxxxTC coursework, which LaTeX command should you use?

A. \formula{...} B. $...$ C. \math{...} D. \equation{...}

* 1. Which command in LaTeX is used to create an ordered list?
     1. \orderlist{...} B. \list{...} C. \sequence{...} D. \begin{enumerate}...\end{enumerate}
  2. When inserting an image in LaTeX, which command would you use?
     1. \image{...} B. \pic{...} C. \includegraphics{...} D. \addimage{...}
  3. How would you set the page margins in LaTeX?
     1. \usepackage{geometry} \geometry{...} B. \setmargins{...}

C. \usepackage{margins} \margins{...} D. \pagesize{...}

* 1. Which LaTeX command is used to create a table with multiple columns?
     1. \usepackage{tabularx} \begin{tabularx}{...} B. \multicol{...}

C. \usepackage{multicol} \begin{multicol}{...} D. \array{...}

**Chapter 3**

**Love Basics**

***Warning***: If you fail this part, you will be thrown out of the club, even if you have scored full marks in previous chapters.

# SAQ

1. When is the birthday of YongTeng Rey?

12.26

1. What is the plural form of *Appendix*?

Appendices

1. Please write down the phonetic symbols for the word "**exit**".

你想说的是exist吧，下次不许打错了

1. What song did YongTeng play on the club recruitment day?

赵雷{朵}{程爱影}

1. The room number of our club office?

D1001

1. Write permutation expressions for the calculation of the number of couples in LEC (You know what I mean).

（7，2）？ Without cat

1. Who is the happiest penguin in LEC? (Happy xx)
2. Birthday of ZhenKai (The day we had dinner at *HaiDiLao*).

05.05

1. Which country had YuHang been for a short college life?

河南

1. What is the favourite activity of this club?

Ofcourse linux

1. Full name of Yuwei’s major in UoE is?

爱丁堡信院里的Advanced Technology for financial computing

1. Dr.SiYuan shared a lecture about?

Jetson Nano traing course

1. YangQian’s favourite way to catch a badminton?

Use hand ofcourse

1. The bottom sentence of YongTeng’s FYP poster is?

LEC members

1. Who is the only one in this club that has a girlfriend?

xiangyucui

# Judgement Question

1. YongTeng and YuWei will go to the same professional school of UoE (School of Informatics). ( yes can’t agree more,UOE is one of the best university in the world)
2. *Judgement Question Chapter 3. Love Basics*
3. ZhenKai loves *XiangCai* a lot, and so does YangQian. ( no)
4. YuWei is a crazy fan of LaTex. ( yes)
5. YuHang and ZhenKai share a bed every night. ( ?)
6. YangQian loves spicy food. (yes )
7. Xiangyu loves both his girlfriend and YongTeng, very very much. (yes )
8. **L.E.C. will love every member of its, deeply and purely, forever and ever.** ( yes)



Love you, guys.