

Sub.	Re-Sub

Assignment Brief Submission&Resub

LOs	LO1 and LO2			
Grade “ Sub”	LO1		LO2	
Grade“Resub”	P	Not Achieved ” repeat unit”	P	Not Achieved ” repeat unit”
Student Name:			ID Number	
Unit Number and Title:	ICT 211	Linux Essentials		
Qualification	Higher National Diploma in ICT program.			
Academic Year:	2023/2024		Assessor Name:	Dr. Hatem Yousry
Assignment Title:	Mid-Term LO1 and LO2		Internal Verifier Name:	Dr. Osama
Assignment No.	1		Issue Date:	9/ 11/2023
Submission Format: Type of Evidence	Document and observation sheet		Submission Date:	23 / 11 /2023

STUDENT DECLARATION

Plagiarism

Plagiarism is a particular form of cheating. Plagiarism must be avoided at all costs and students who break the rules, however innocently, may be penalised. It is your responsibility to ensure that you understand correct referencing practices. As a university level student, you are expected to use appropriate references throughout and keep carefully detailed notes of all your sources of materials for material you have used in your work, including any material downloaded from the Internet. Please consult the relevant unit lecturer or your course tutor if you need any further advice.

Student Declaration

Student declaration

I certify that the assignment submission is entirely my own work and I fully understand the consequences of plagiarism. I understand that making a false declaration is a form of malpractice.

Also, I acknowledge that I have received the feedback about my work from the assessor.

Student signature:

Date: / /2023

FORMATIVE FEEDBACK

Assessor's Formative Feedback:

Confirm action completed:

Assessor Signature:

Date:

IV assessment brief approval

IV's signature:

Osama Tharwat

Date: 8 /11/2023

Learning Outcomes and Assessment Criteria:

Learning Outcome	Pass	Merit	Distinction
LO1 Discover Linux as an operating system.	P1 Describe one of the main components of Linux operating system. P2 Install one of the Linux distributions such as Ubuntu. P3 Explore the advantages and disadvantages of Linux operating system. P4 Compare and contrast Linux with other operating systems for one service application.	M1 Present briefly one of various Linux distributions with their main features and applications.	D1 Evaluate the benefits of using Linux as an operating System for a given application.
LO2 Understand the command line and shell scripts.	P5 Explore Linux kernel, terminal, and shell. P6 List some of Linux text editor programs. P7 Carry out some of arithmetic and logic operations in terminal. P8 Carry out some of command lines with different command options and arguments in terminal. P9 Create a simple Shell script using loops and decision making for a given task.	M2 Analyze the usage of different types of loops and decision making conditions in Shell script Programming for a given application.	D2 Evaluate the usage of Pipe and Redirection methods for some different commands in a given process.

Scenario

- You are a Linux System administrator, who is responsible for managing service applications such as work applications, social media programs and online server based games.
- In additions, system administrators often use shell scripts to automate routine tasks. As a rule of thumb, if a task has to be performed periodically (even when it's only once a month). The user's login process is considered as one of most important repeated administration tasks. Assume a login process as shown in figure (1), which is used to check the user login for three attempts with try again message indicting the attempt number, if the user login is valid it prints "Welcome 'User Name' ". Otherwise, if wrong, it gives a message to try again login indicting the remaining trials number. After three incorrect trials it gives an alert message "The Account is Locked".
- Based on that Scenario, do the following tasks:**

- **Task1: (In Lab Task)**

1. Install Ubuntu OS, then identify its version.
 2. Carry out the following:
 - a. Use “Echo” Command with different options and arguments to examine some Arithmetic, Logic and Quotes operations form user's input variables in three different examples.
 - b. Use “Cat” command with different options and arguments in three different examples to create single or multiple files, view content of a file, and redirect output in terminal or files.
 - c. In light of that scenario, create a simple Shell script for user’s login process as described in the given scenario and as shown in figure (1). **Use your Name as a user login name and assume your password.**
 - d. Form the given scenario, Analyze the usage of different types of loops and decision-making conditions in Shell script for the given user’s login process.
- Print out the command line and script files and their outputs.

- **Task 2:**

- a. Describe kernel types and link each type with one of Linux operating systems.
- b. Based on your exploration of Linux operating system, critically explain the advantages and disadvantages of **kali** Linux as one of the most popular Linux based distribution. Then from your point of view, present briefly some of its features such as desktop environment and kernel type and applications such as network analysis or system monitoring applications.
- c. Compare and contrast the required system specifications for one play Gamming applications if it has been used in basic operating system platform such as Microsoft Windows, Android OS, and Linux distribution: Red Hat or Debian. Then, discuss how it could be matched with each operating systems, and suggest any programs needed to make it works with that application, if found.
- d. Critically evaluate the benefits and drawbacks of using **Ubuntu** Linux rather than **kali** Linux. For example: The desktop environment, application programs, and Web browsers.

• **Task 3:**

- From your exploration, contrast shell types and extract the relations for Linux Debian distributions.
- List some of Ubuntu text editors and create text file using one of them.
- Evaluate the Pipe method for two commands, such that output of one command serves as input to the next, with many options and arguments, and examine that with at least three different examples.
- Critically evaluate the usage of Redirected method using "tail" and "head" commands for text files with example.

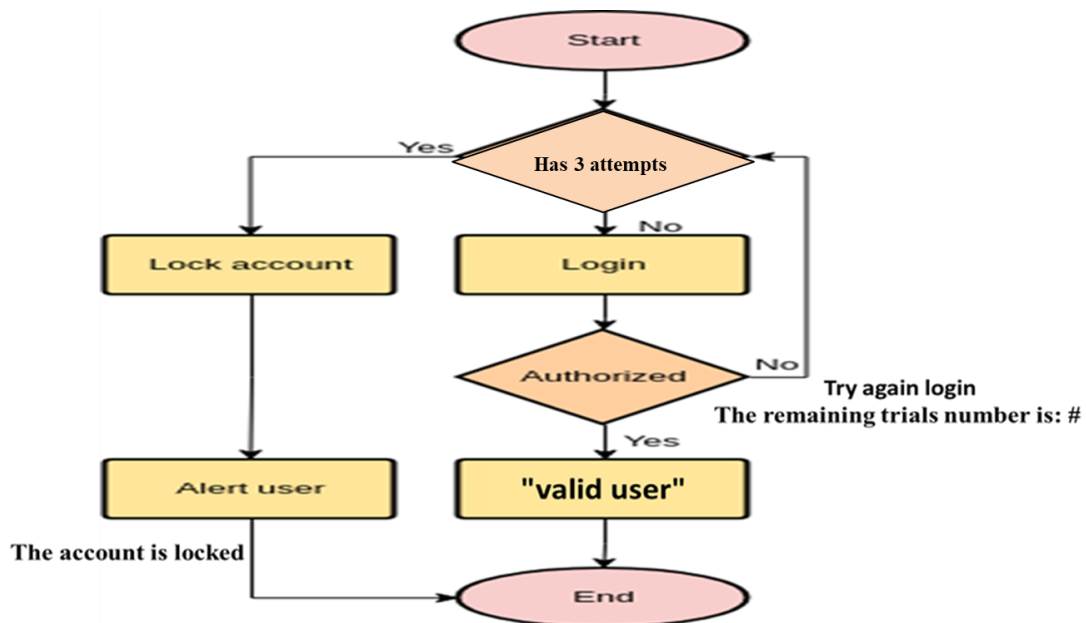


Figure 1 Login Process.

Sources of information

- Class handouts and learning materials.
- Individual research.
- Lab tutorials.
- <https://ubuntu.com/>

Higher Nationals - Summative Assignment Feedback Form

Student Name			Student ID	
Unit Title				
Assignment Number(x of y)		Assignment Title		
<p>Assessor Summative Feedback: Feedback should be against the learning outcomes and assessment criteria to help students understand how these inform the process of judging the overall grade. *should be constructive and useful including:</p> <ul style="list-style-type: none"> - Feedback should give full guidance to the students on how they have met the learning outcomes and assessment criteria <p>a) Strengths of performance</p> <p>b) Limitations of performance</p> <p>c) Any improvements needed in future assessments</p>				
Assessor Signature:		Date: / /2023		
Re-submission Date	/ /2023	Actual Date Received Re-submission	/ /2023	
<p>Resubmission Feedback:</p> <p>*Please note resubmission feedback is focussed only on the resubmitted work</p>				
Assessor Signature:		Date: / /2023		
Internal Verifier's Comments:				
Signature:		Date: / /2023		

* Please note that grade decisions are provisional. They are only confirmed once internal and external moderation has taken place and grades decisions have been agreed at the assessment board.

Observation Sheet

Student Name and ID:			
Unit Number and Title:			Linux Essentials
Qualification		Higher National Diploma in Information and Communications Technology (ICT)	
Assignment No.	1	Assignment Title:	Midterm - LO1 and LO2

Description of the activity undertaken

- Install one of the Linux distributions such as Ubuntu.
- Carry out some command line in Linux terminal.
- Create a simple Shell script.

Observation Checklist

The tutor will observe the student perform the following operation independently

Criteria Ref.	Task No.	Task Description	Tick if met
P2 P7 P8 P9 M2	1	Install Ubuntu OS then identify its version.	<input type="checkbox"/>
		Carry out the "Echo" Command with different options and arguments to examine some Arithmetic, Logic and Quotes operations form user's input variables in three different examples.	<input type="checkbox"/>
		Carry out "Cat" command with different options and arguments in three different examples to create single or multiple files, view content of a file, and redirect output in terminal or files.	<input type="checkbox"/>
		In light of the given scenario, create a simple Shell script for user's login process as described in the scenario. Use your name as a user login name and assume your password.	<input type="checkbox"/>
		Analyze the usage of different types of loops and decision making conditions from your Shell script.	<input type="checkbox"/>

- Print out the command line and script files and their outputs.

Observer Signature		Date	
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Usama Tharwat