

# INDEX

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# 1. WINDOWS XP AND UBUNTU SERVER INSTALLATION SUMMARY

System: Ubuntu (32-bit)

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Create Virtual Machine

Name and operating system

Please choose a descriptive name and destination folder for the new virtual machine and select the type of operating system you intend to install on it. The name you choose will be used throughout VirtualBox to identify this machine.

Name:


Windows XP

Machine Folder:

C:\Users\andile\VirtualBox VMs

Type:

Microsoft Windows



Version:

Windows XP (32-bit)

oller:  
ers:

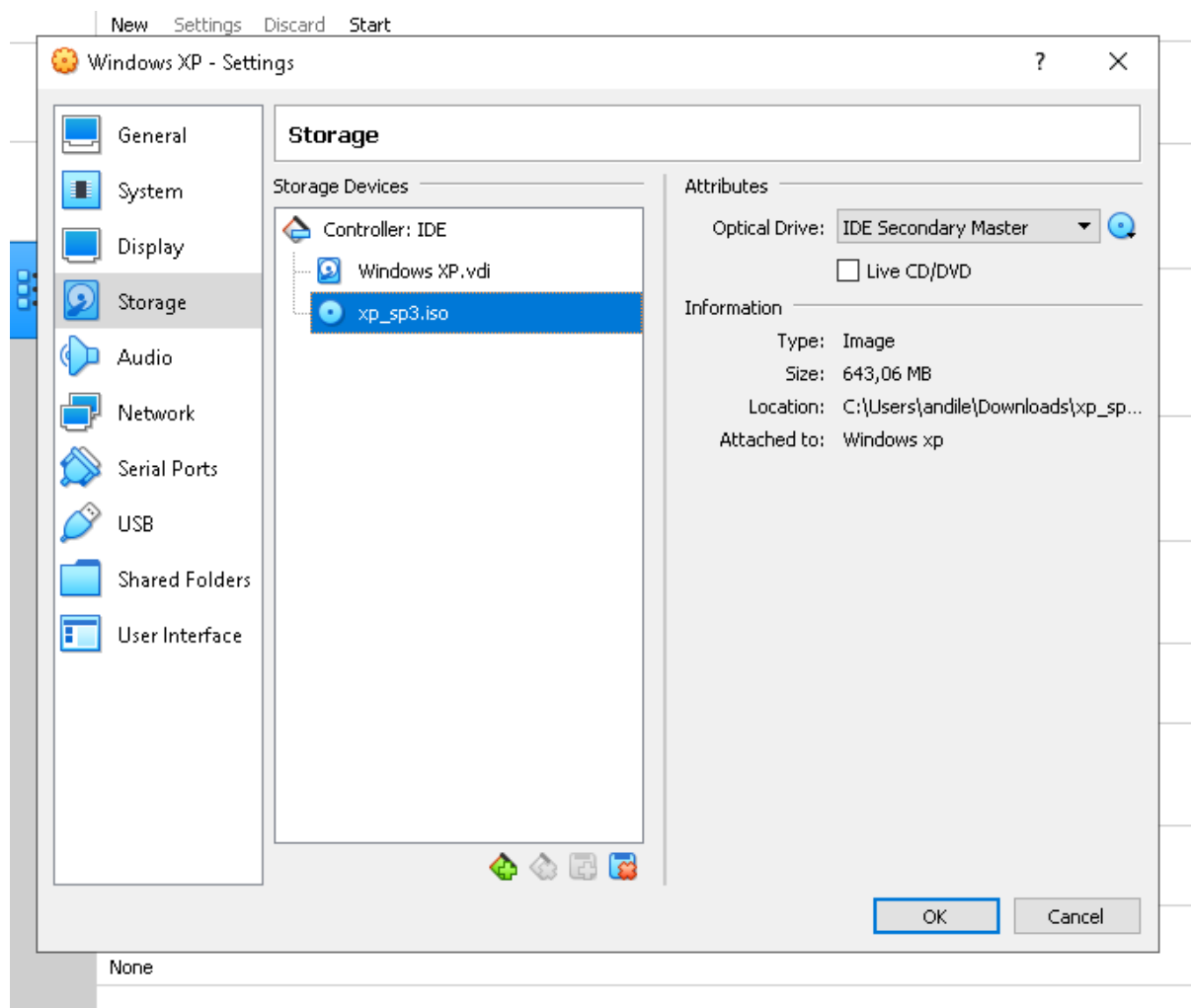
Expert Mode

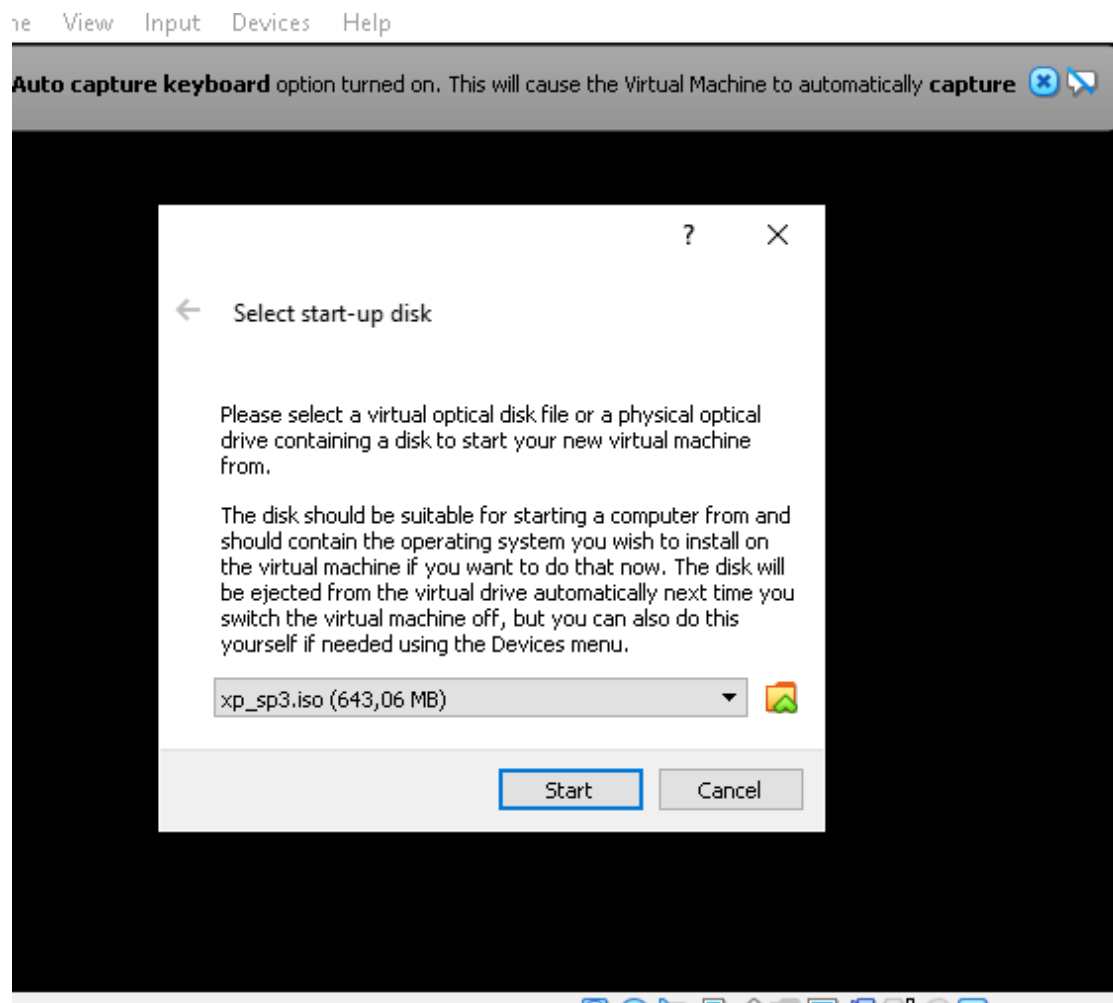
Next

Cancel

ed folders

ription





## Appliance to import

Please choose the source to import appliance from. This can be a local file system to import OVF archive or one of known cloud service providers to import cloud VM from.

Source:

Please choose a file to import the virtual appliance from. VirtualBox currently supports importing appliances saved in the Open Virtualization Format (OVF). To continue, select the file to import below.

File:

## Import Virtual Appliance

### Appliance settings

These are the virtual machines contained in the appliance and the suggested settings of the imported VirtualBox machines. You can change many of properties shown by double-clicking on the items and disable others using the check boxes below.

Virtual System 1	
Name	Ubuntu_Server 1 1 1
Guest OS Type	Ubuntu (32-bit)
CPU	1
RAM	1024 MB
DVD	<input checked="" type="checkbox"/>
USB Controller	<input type="checkbox"/>
Sound Card	<input type="checkbox"/>
Network Adapter	<input type="checkbox"/>
Storage Controller	<input type="checkbox"/>
Storage Controller	<input type="checkbox"/>
Storage Controller	<input type="checkbox"/>
Virtual Disk Image	Ubuntu_Server 1 1 1-disk001.vmdk
Base Folder	C:\Users\andile\VirtualBox VMs
Primary Group	/

Importing Appliance ...: Importing appliance 'C:\Users\andile\Downloads\U...

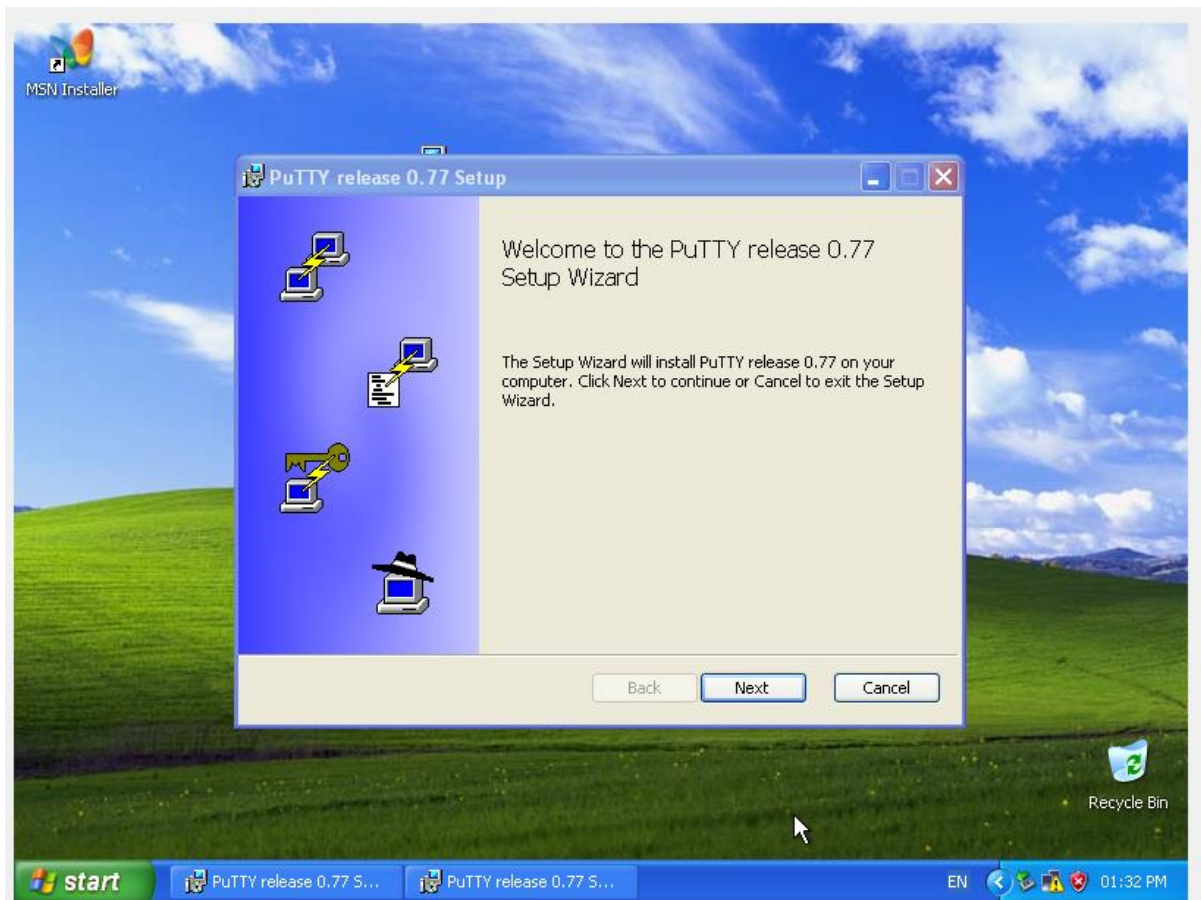
Importing virtual disk image 'Ubuntu\_Server 1 1 1-disk001.vmdk' ... (2/3)

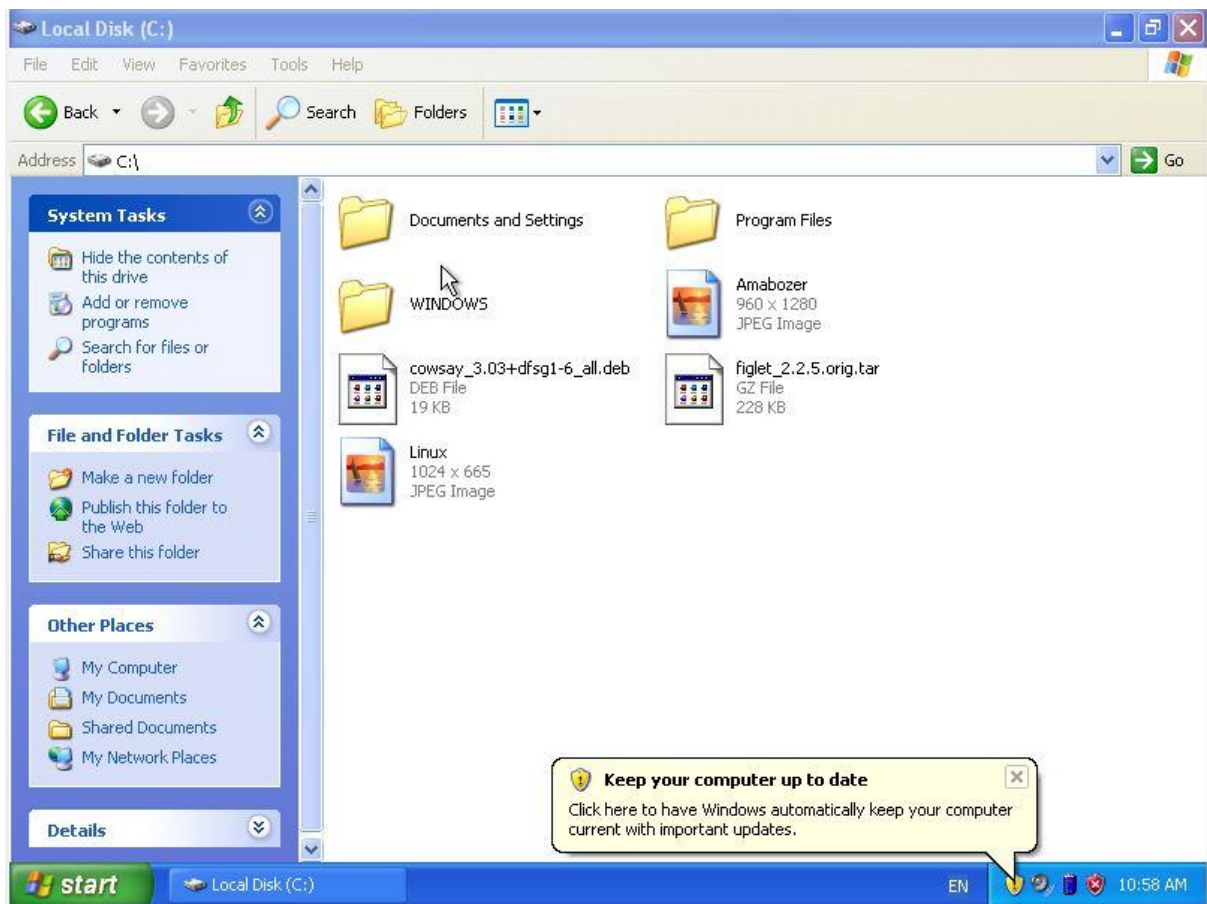
1%

4 minutes remaining

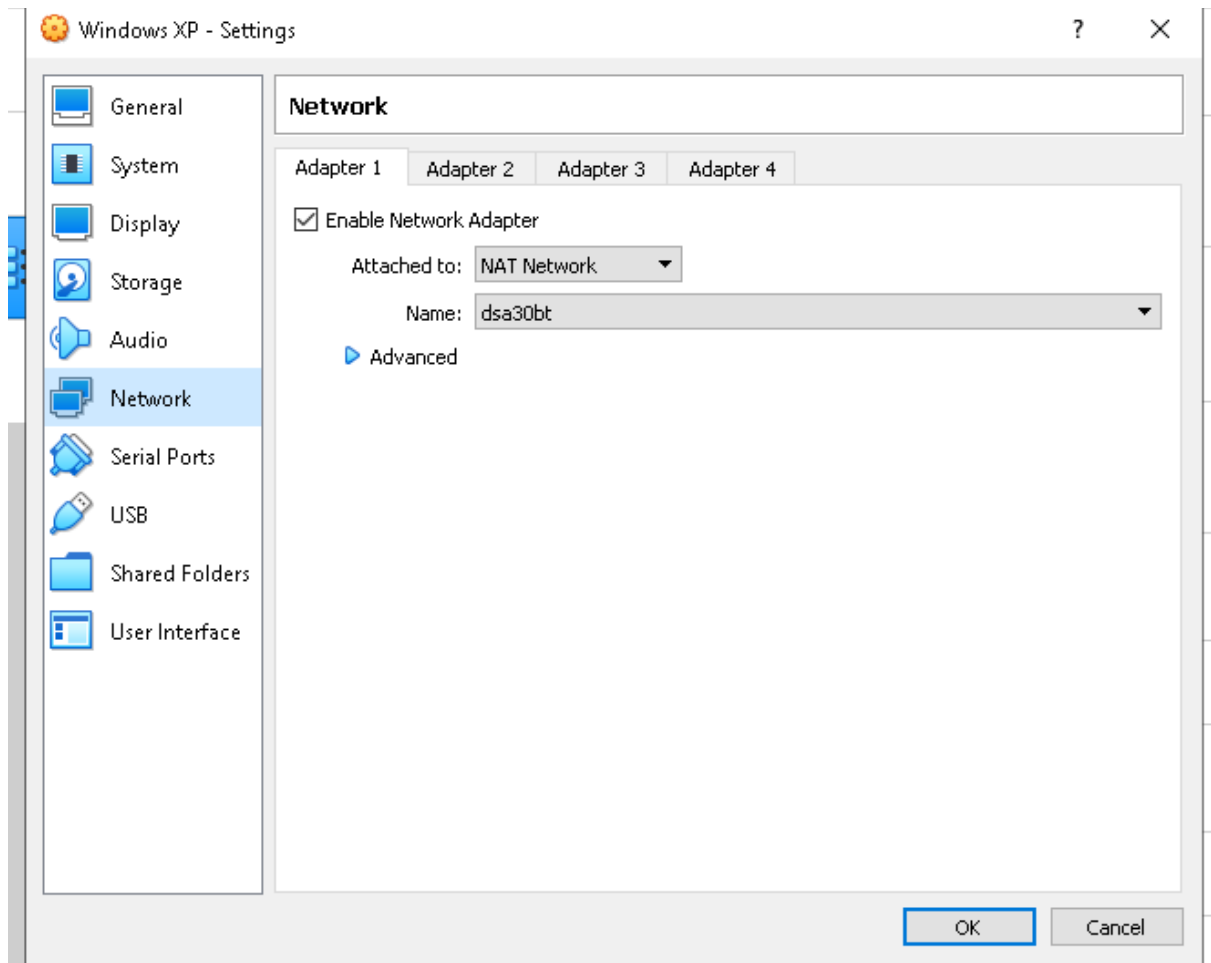


## 2. INSTALLATION OF PUTTY ,FIGLET,COWSAY AND IMAGES

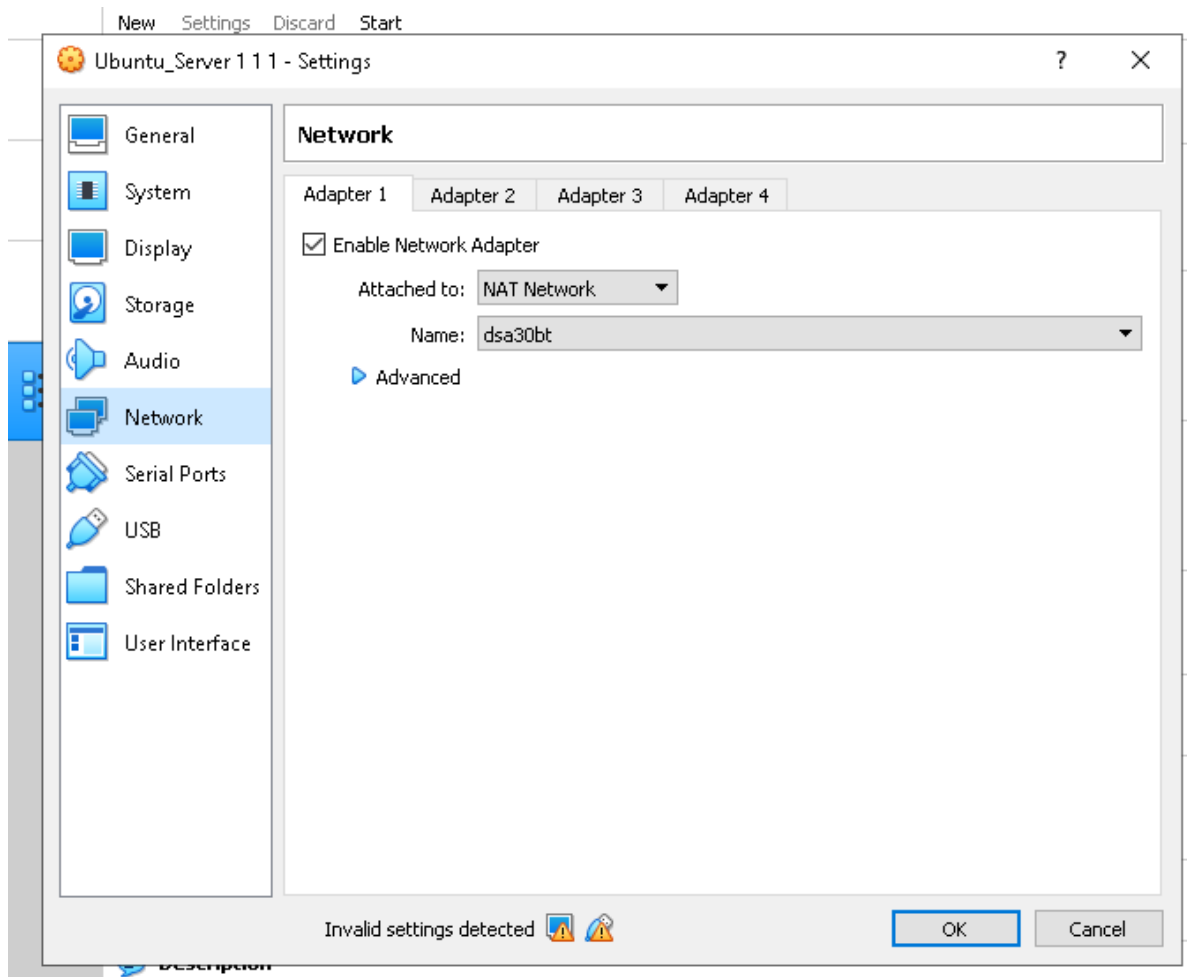




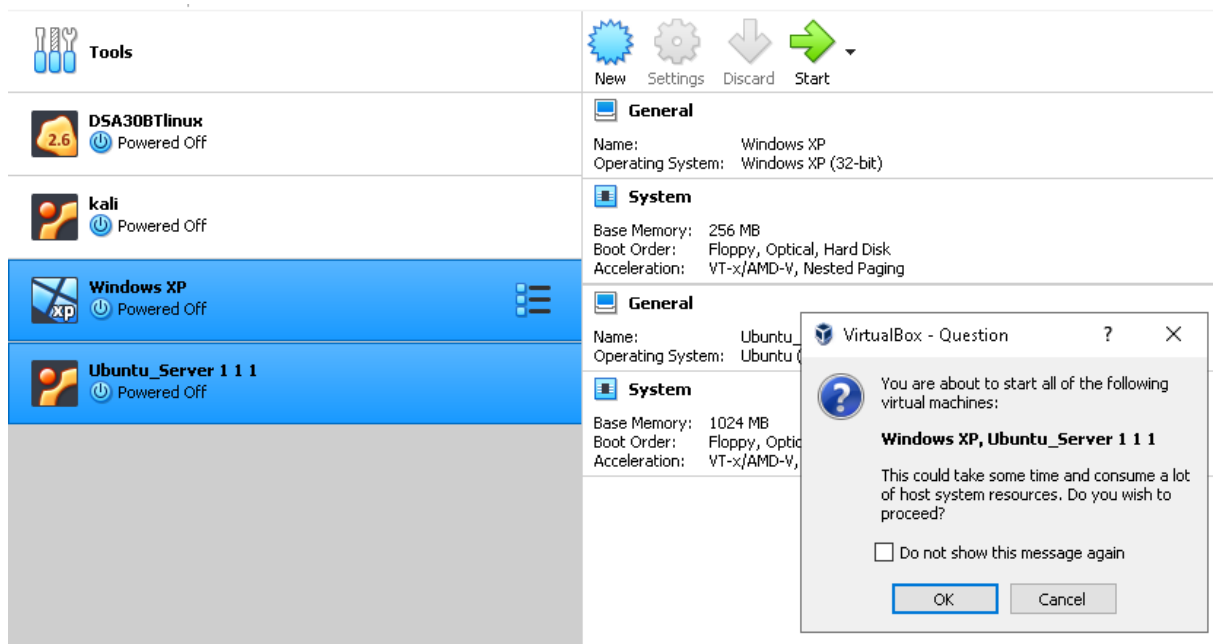
## 2. SETUP NETWORK OF WINDOWS XP AND UBUNTU SERVER







#### 4.RUNNING OF WINDOWS XP AND UBUNTU SERVER SIMULTANEOUSLY



## ACTIVITY 1

**PURPOSE :** Writing a welcoming script called `.bashrc`, the script must run as soon as you have logged in ubuntu server. The script must greet the user depending on the time of the day. The script must display a greeting message on the terminal.

```
GNU nano 2.5.3      File: .bashrc

YELLOW="\033[33m"
RED="\033[31m"
BLUE="\033[34m"

echo -e "$YELLOW Enter username"
read username
echo -e "$RED Enter password"
read password

if [[ $username == "dsa" || $password == "1234" ]];then
echo -e "$BLUE Login successful "
currtime=$(date +%H)
if [ $currtime -lt 12 ];then
cowsay -f ghostbusters Good morning $username ,Welcome to DSA30BT Presentation!
elif [ $currtime -lt 18 ];then
cowsay -f milk.cow Good afternoon $username ,Welcome to DSA30BT Presentation!
else
cowsay -f eyes Good evening $username ,Welcome to DSA30BT Presentation!
fi
else
echo "invalid login"
logout
fi
```

## Morning output

```
* Support:             https://ubuntu.com/advantage

239 packages can be updated.
153 updates are security updates.
```

Enter username  
dsa

Enter password  
1234

Login successful

/ Good morning dsa ,Welcome to DSA30BT \  
\ Presentation! /

-----  
/\

XXXXXXXXXXXXXXXXXXXXX\n.  
.-XXX( 0 0 )XXXXXXXXXXXXXXXXXX-  
/XXX( U ) XXXXXXX\n  
/XXXXX( )\_ XXXXXXXXXXXXXXX\n  
/XXXXX/ ( 0 ) XXXXXX \XXXXX\  
XXXXX/ \ XXXXXX \ XXXXX  
XXXXXX \ XXXXXX \ ---->  
--- XXX \ XXXXXX \ \_\_\_/  
\\\_/\_/\_/\_/\_/ XXXXXX \/\_/\_/\_/\_/\_/=  
\\\_/\_/\_/\_/\_/ XXXXXX \\_-- XXXXXX  
\\\_/\_/\_/\_/\_/ XXXXXX /XXXXX  
\\XXXXXXXXX \ /XXXXX/  
\\XXXXXX > \_/XXXXX/  
\\XXXXX--/\_ -- XXXX/  
-XXXXXXXX----- XXXXX-  
\\XXXXXXXXXXXXXXXXXXXXX/  
""UXXXXXXXXXXXXXXXXXXU""

dsausar@ubuntu:~\$

## Afternoon output


```
Last login: Fri Oct 21 12:01:03 SAST 2022 on tty1
Welcome to Ubuntu 16.04.3 LTS (GNU/Linux 4.4.0-87-generic i686)
```

- \* Documentation: <https://help.ubuntu.com>
- \* Management: <https://landscape.canonical.com>
- \* Support: <https://ubuntu.com/advantage>

```
239 packages can be updated.
153 updates are security updates.
```

```
Enter username  
dsa  
Enter password  
1234  
Login successful
```

```
✓ Good afternoon dsa ,welcome to DSA30BT \
✓ Presentation! \
```



```

1 #include <stdio.h>
2
3 int main()
4 {
5     printf("0 0 <");
6 }
dsasuser@ubuntu:~$

```

## Evening output

```

Ubuntu_Server 11 1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

Hint: Num Lock on

ubuntu login: dsouser
Password:
Last login: Fri Oct 21 19:00:34 SAST 2022 on tty1
Welcome to Ubuntu 16.04.3 LTS (GNU/Linux 4.4.0-87-generic i686)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

239 packages can be updated.
153 updates are security updates.

Enter username
dsa
Enter password
1234
Login successful

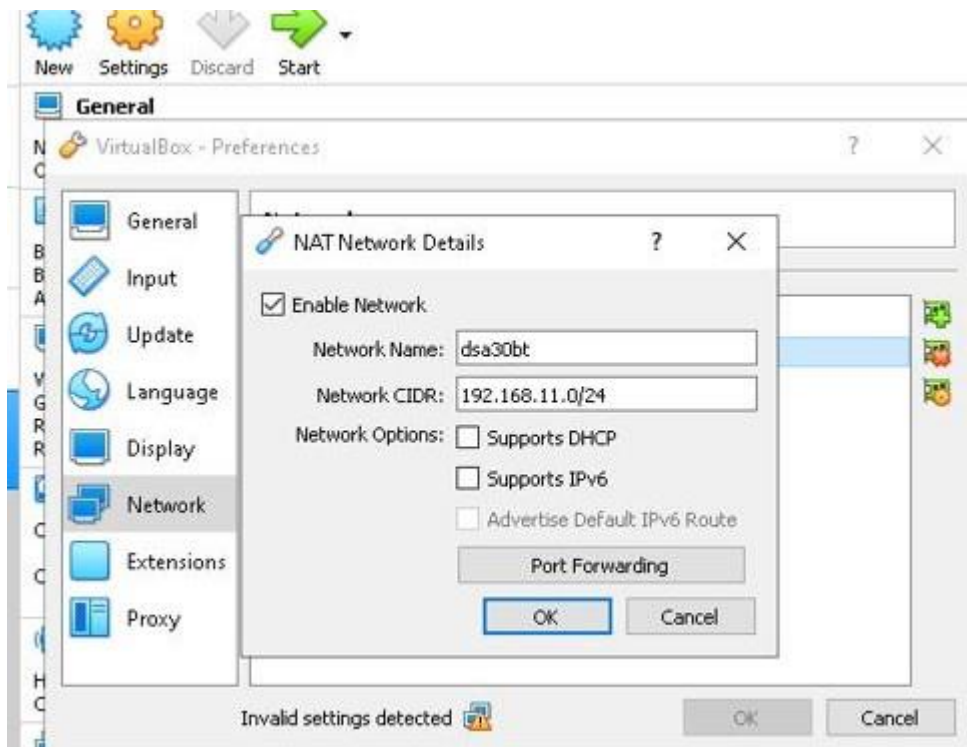
/ Good evening dsa ,Welcome to DSA30BT \
\ Presentation! /

      .:?????????:.
    .:????????????:
  .:?????????????
.:?????????????LUWW$$$
:$NMW$!?:. :!!!!!!XUWW$$$$$$$$$$$P
$$$$$#W$!?: .<!!!!LUW$$$" $$$$$$$$#
$$$$$ $$$$UX :?!UW$$$$$$$$$$$ 4$$$$$*
^$$$B $$$$^ $$$$$$$$$$$$ d$$R"
"*$bd$$$$$ '*$$$$$$$$$$$$$O+#"
  ~~~~~
dsouser@ubuntu:~$

```

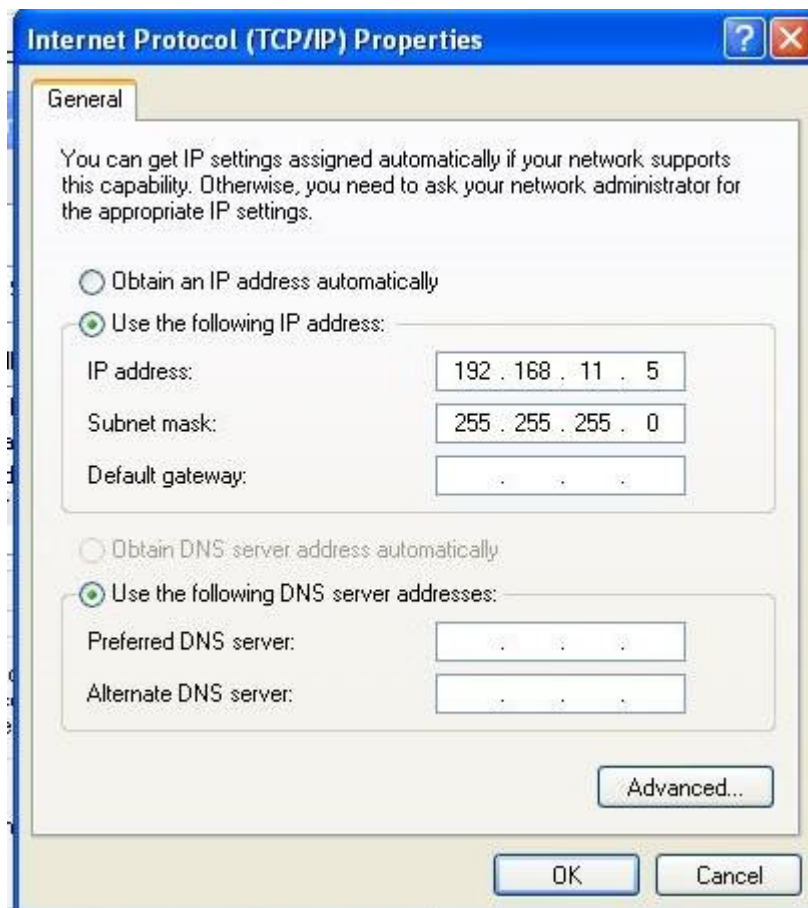
## ACTIVITY 2

### TASK 1 : Setup the vm



### TASK 2 : Setup windows xp and ubuntu server to communicate.

#### Setting up ip address on windows xp.



## Setting up ip address on ubuntu server.

```
Ubuntu_Server 1 1 1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
dsausar@ubuntu:~$ sudo ip addr add 192.168.11.100/24 broadcast 192.168.11.255 dev enp0s3
[sudo] password for dsausar:
dsausar@ubuntu:~$ ifconfig
enp0s3  Link encap:Ethernet  HWaddr 08:00:27:0f:44:ee
        inet addr:192.168.11.100  Bcast:192.168.11.255  Mask:255.255.255.0
        inet6 addr: fe80::a00:27ff:fe0f:44ee/64  Scope:Link
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
        RX packets:179 errors:0 dropped:0 overruns:0 frame:0
        TX packets:227 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:22422 (22.4 KB)  TX bytes:75546 (75.5 KB)

lo      Link encap:Local Loopback
        inet addr:127.0.0.1  Mask:255.0.0.0
        inet6 addr: ::1/128  Scope:Host
        UP LOOPBACK RUNNING  MTU:65536  Metric:1
        RX packets:19126 errors:0 dropped:0 overruns:0 frame:0
        TX packets:19126 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1
        RX bytes:1153426 (1.1 MB)  TX bytes:1153426 (1.1 MB)

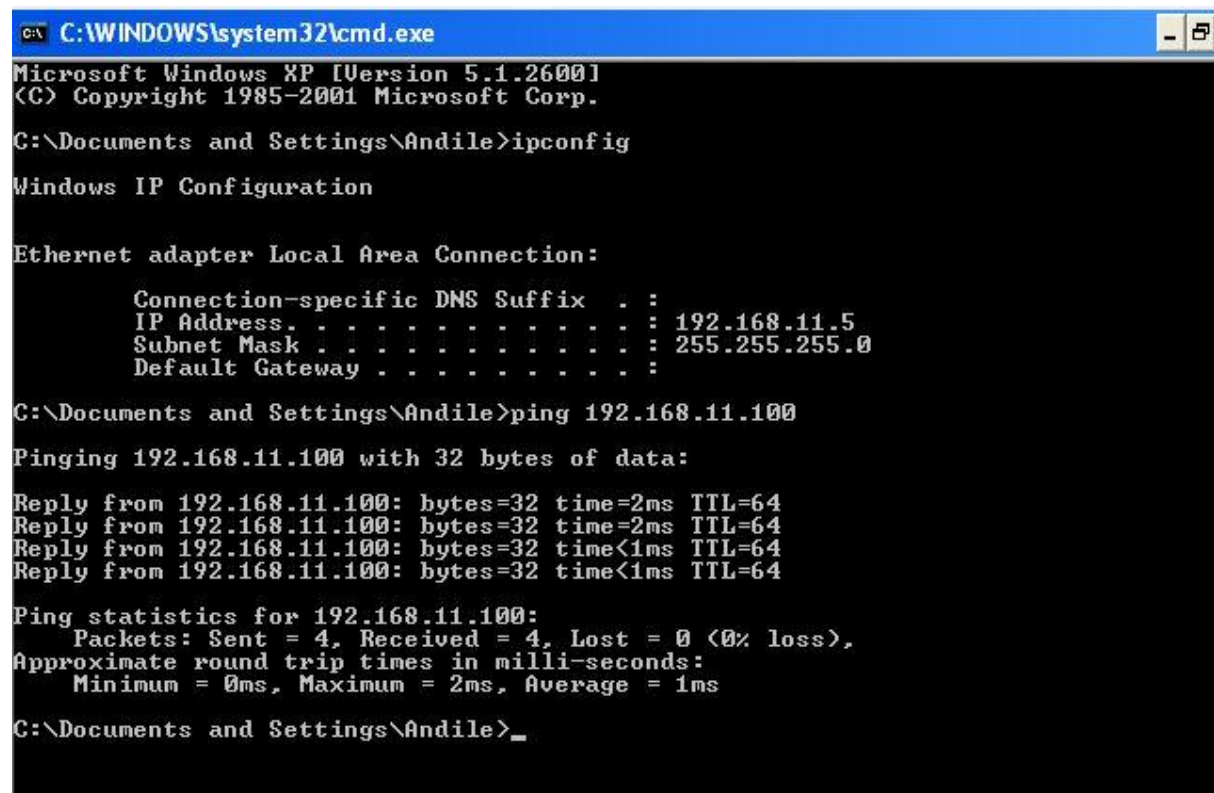
dsausar@ubuntu:~$ _
```

### TASK 3: Testing connectivity.

1.open command prompt on windows xp

2.type ipconfig

3.type ping and the ip address of ubuntu server



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Andile>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    IP Address. . . . . : 192.168.11.5
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 

C:\Documents and Settings\Andile>ping 192.168.11.100

Pinging 192.168.11.100 with 32 bytes of data:

Reply from 192.168.11.100: bytes=32 time=2ms TTL=64
Reply from 192.168.11.100: bytes=32 time=2ms TTL=64
Reply from 192.168.11.100: bytes=32 time<1ms TTL=64
Reply from 192.168.11.100: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.11.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 1ms

C:\Documents and Settings\Andile>_
```



#### TASK 4 : Connect windows xp to ubuntu server using FTP and upload pictures

```
C:\ C:\WINDOWS\system32\cmd.exe

C:\Documents and Settings\Andile>cd\

C:\>ftp 192.168.11.100
Connected to 192.168.11.100.
220 Welcome to DSA30BT FTP service.
User (192.168.11.100:(none)): ftpuser
331 Please specify the password.
Password:
230 Login successful.
ftp> cd ftp
250 Directory successfully changed.
ftp> cd files
250 Directory successfully changed.
ftp> quit
221 Goodbye.

C:\>dir
Volume in drive C has no label.
Volume Serial Number is 3881-C4B5

Directory of C:\

2022/10/18  03:05 PM                186,217 Amabozer.jpg
2022/10/11  11:55 AM                  0 AUTOEXEC.BAT
2022/10/11  11:55 AM                  0 CONFIG.SYS
2019/08/16  11:54 AM            18,532 cowsay_3.03+dfsg1-6_all.deb
2022/10/11  12:09 PM          <DIR>      Documents and Settings
2019/04/16  02:07 PM            233,201 figlet_2.2.5.orig.tar.gz
2022/10/19  11:47 AM            62,554 Linux.jpg
2022/10/17  01:34 PM          <DIR>      Program Files
2022/10/17  02:25 PM          <DIR>      WINDOWS
               6 File(s)            500,504 bytes
               3 Dir(s)      9,006,718,976 bytes free

C:\>
```

#### Windows xp terminal go to file directory



Type:put linux .jpg and Amabozer.jpg

```
C:\>ftp 192.168.11.100
Connected to 192.168.11.100.
220 Welcome to DSA30BT FTP service.
User (192.168.11.100:(none)): ftpuser
331 Please specify the password.
Password:
230 Login successful.
ftp> cd files
550 Failed to change directory.
ftp> cd ftp
250 Directory successfully changed.
ftp> cd files
250 Directory successfully changed.
ftp> put cowsay*.deb
200 PORT command successful. Consider using PASV.
150 Ok to send data.
226 Transfer complete.
ftp: 18532 bytes sent in 0.01Seconds 1853.20Kbytes/sec.
ftp> quit
```

```
C:\WINDOWS\system32\cmd.exe
C:\>ftp 192.168.11.100
Connected to 192.168.11.100.
220 Welcome to DSA30BT FTP service.
User (192.168.11.100:(none)): ftpuser
331 Please specify the password.
Password:
230 Login successful.
ftp> cd ftp
250 Directory successfully changed.
ftp> cd files
250 Directory successfully changed.
ftp> ls
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
Amabozer.jpg
Linux.jpg
cowsay_3.03+dfsg1-6_all.deb
dsa30bt.txt
226 Directory send OK.
ftp: 67 bytes received in 0.00Seconds 67000.00Kbytes/sec.
ftp> quit
221 Goodbye.
C:\>
```

## TASK 5 : Locate the cowsay that was uploaded to ubuntu FTP server

```
dsausuer@ubuntu:~$ ls
dsa
dsausuer@ubuntu:~$ ftp localhost
Connected to localhost.
220 Welcome to DSA30BT FTP service.
Name (localhost:dsausuer): ftpuser
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> cd ftp
250 Directory successfully changed.
ftp> cd files
250 Directory successfully changed.
ftp> ls
200 EPRT command successful. Consider using EPSV.
150 Here comes the directory listing.
-rw----- 1 1001 1001 18532 Oct 18 15:36 cowsay_3.03+dfsg1-6_all.deb
-rw-r--r-- 1 0 0 57 Jun 02 2021 dsa30bt.txt
226 Directory send OK.
ftp> get cowsay_3.03+dfsg1-6_all.deb
local: cowsay_3.03+dfsg1-6_all.deb remote: cowsay_3.03+dfsg1-6_all.deb
200 EPRT command successful. Consider using EPSV.
150 Opening BINARY mode data connection for cowsay_3.03+dfsg1-6_all.deb (18532 bytes).
226 Transfer complete.
18532 bytes received in 0.00 secs (29.6535 MB/s)
ftp>
```

## Installation of cowsay.

```
dsausuer@ubuntu:~$ ls
cowsay_3.03+dfsg1-6_all.deb dsa
dsausuer@ubuntu:~$ sudo dpkg --install cowsay*.deb
[sudo] password for dsausuer:
Selecting previously unselected package cowsay.
(Reading database ... 61587 files and directories currently installed.)
Preparing to unpack cowsay_3.03+dfsg1-6_all.deb ...
Unpacking cowsay (3.03+dfsg1-6) ...
Setting up cowsay (3.03+dfsg1-6) ...
Processing triggers for man-db (2.7.5-1) ...
dsausuer@ubuntu:~$ cowsay hello
```

```
< hello >
-----
      ^ ^
     (oo)\_____/
      (_____)  )\
           ||----w |
           ||     ||
```

## TASK 6: Locate the pictures that was uploaded to ubuntu FTP server

```
ftp> get Amabozer.jpg
local: Amabozer.jpg remote: Amabozer.jpg
200 EPRT command successful. Consider using EPSV.
150 Opening BINARY mode data connection for Amabozer.jpg (186217 bytes).
226 Transfer complete.
186217 bytes received in 0.00 secs (76.0558 MB/s)
ftp> get Linux.jpg
local: Linux.jpg remote: Linux.jpg
200 EPRT command successful. Consider using EPSV.
150 Opening BINARY mode data connection for Linux.jpg (62554 bytes).
226 Transfer complete.
62554 bytes received in 0.00 secs (59.2415 MB/s)
ftp> quit
221 Goodbye.
dsausar@ubuntu:~$ ls
Amabozer.jpg cowsay_3.03+dfsg1-6_all.deb dsa Linux.jpg
dsausar@ubuntu:~$
```

## TASK 7 :UPDATES THE WEBSITE

We moved images to html files using command

**Mv ~\*.jpg /var/www/dsa\*/htm\***

```
Ubuntu_Server 11 1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
dsausar@ubuntu:~$ ls
cowsay_3.03+dfsg1-6_all.deb dsa
dsausar@ubuntu:~$
dsausar@ubuntu:~$ ls
cowsay_3.03+dfsg1-6_all.deb dsa
dsausar@ubuntu:~$ cd /var/www
dsausar@ubuntu:/var/www$ ls
dsa30bt.com html
dsausar@ubuntu:/var/www$ cd dsa*
dsausar@ubuntu:/var/www/dsa30bt.com$ ls
html_files
dsausar@ubuntu:/var/www/dsa30bt.com$ cd htm*
dsausar@ubuntu:/var/www/dsa30bt.com/html_files$ ls
aboutus.html Amabozer.jpg index.html Linux.jpg
dsausar@ubuntu:/var/www/dsa30bt.com/html_files$ _
```



## Type nano index.html

```
GNU nano 2.5.3      File: index.html

<html>
<head>
<title>Hello Welcome to DSA30BT website for Andile, Innocent & Kassius</title>
</head>

<body>
<h1><b>This is DSA30BT AIK Webpage</b></h1>
<p>

</p>
<p>
For more info about us <a href="aboutus.html" > click here </a>
</p>
</body>
</html>
```

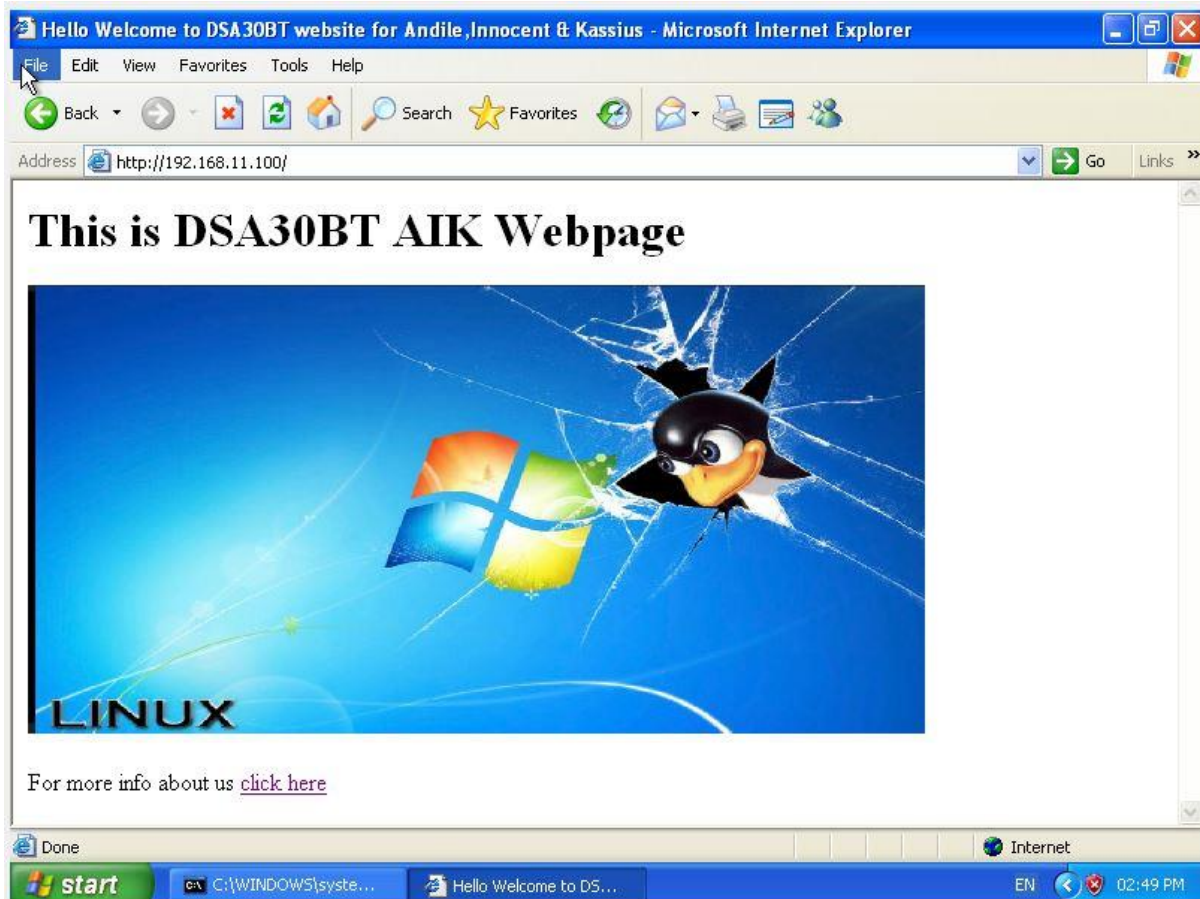
## Type nano aboutus.html

```
GNU nano 2.5.3      File: aboutus.html

<html>
<head>
<title>This is developers Amabozer webpage</title>
</head>
<style>
p{
    background-color: yellow;
    border: 2px solid white;
    padding: 15px;
    margin: 20px;
    font-weight: bold;
}
h1 {
    font-weight: bold;
}
body{
background-color: rgb(123,126,86);
}
</style>
<body>
<h1><b>This is Amabozer webpage</h1></b>
<p>
</p>
<p>
<b>This are the group members</b></p>
<p>
Andile<br>
Innocent<br>
Cassius<br>
</p>
</body>
</html>
```

**TASK 8: Verify that the website is updated.**

**We went to windows xp ,open in internet explorer and type ip address of ubuntu server.**



**After clicking the link**

