Task 6

A) Find the Flag {******} that is in the Vulnerable System

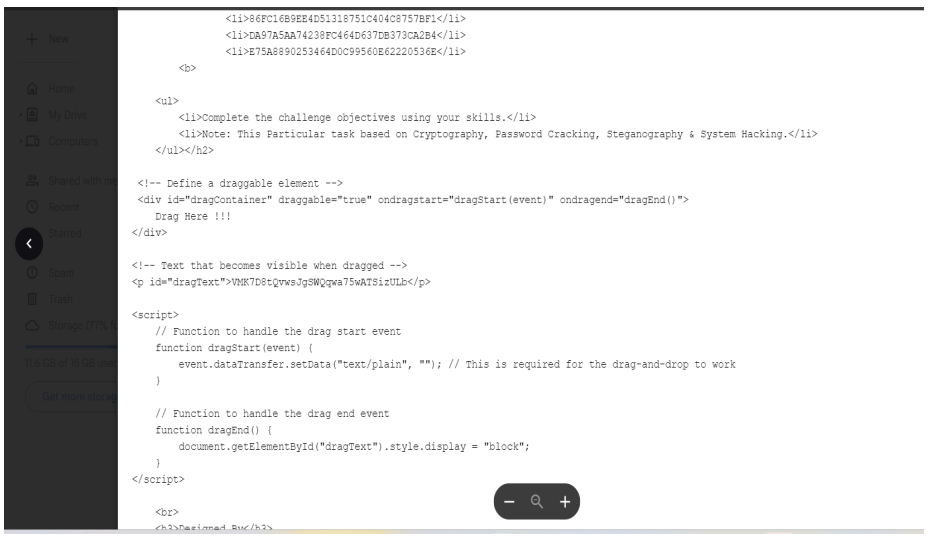
Identify the hidden message in the README file Decrypt the Secret Data to get a link

Download the OVA file from the link

Import the OVA file

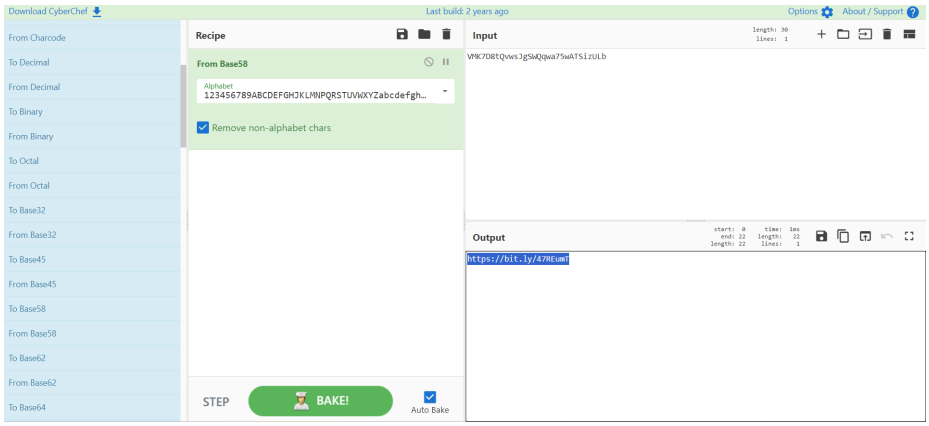
Tools used : cyberchef.io

Step 1 : Open the Readme file first and carefully read the hidden message

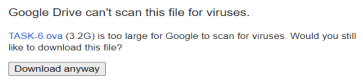


```
                <li>86FC16B9EE4D51318751C404C8757BF1</li>
                <li>DA97A5AA74238FC464D637DB373CA2B4</li>
                <li>E75A889025346 4D0C99560E62220536E</li>
        <b>

    <ul>
        <li>Complete the challenge objectives using your skills.</li>
        <li>Note: This Particular task based on Cryptography, Password Cracking, Steganography & System Hacking.</li>
    </ul></h2>

 <!-- Define a draggable element -->
 <div id="dragContainer" draggable="true" ondragstart="dragStart(event)" ondragend="dragEnd()">
    Drag Here !!!
</div>

<!-- Text that becomes visible when dragged -->
<p id="dragText">VMK7D8tQvwsJgSWQqwa75wATSizULb</p>

<script>
    // Function to handle the drag start event
    function dragStart(event) {
        event.dataTransfer.setData("text/plain", ""); // This is required for the drag-and-drop to work
    }

    // Function to handle the drag end event
    function dragEnd() {
        document.getElementById("dragText").style.display = "block";
    }
</script>

    <br>
```

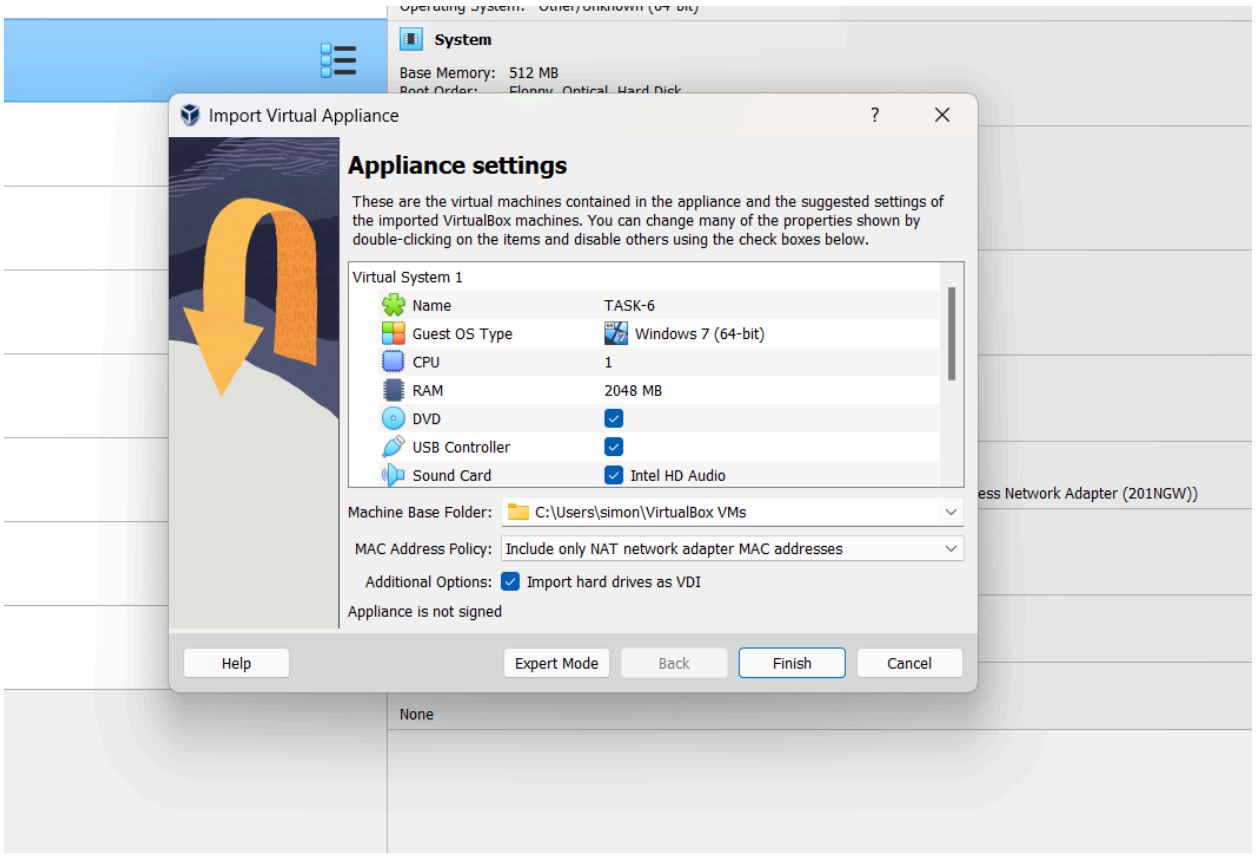
Step 2 : The message is in the encrypted format we need to decrypt message using tools like cyberchef and use Base58 for decryption



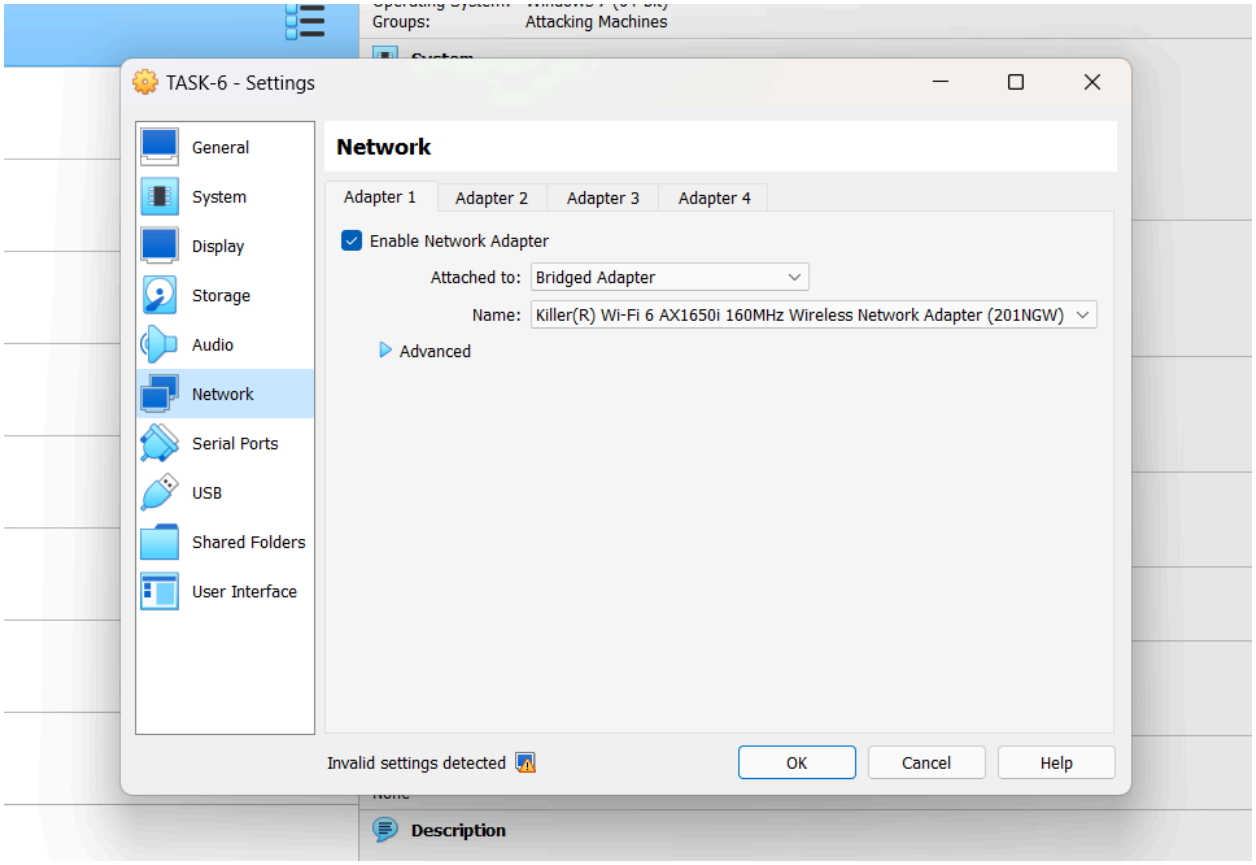
Step 3 : When decrypted we will get a link to download, open that link in browser and click on download the OVA



Step 4 : Import the OVA into virtual box, just double click on the OVA file which we downloaded, if might ask permission just click on agree and finish



Step 5 : Check the network setting and change the network setting to bridge adapter because the Kali linux machine is in bridge adapter



B) Gaining Access

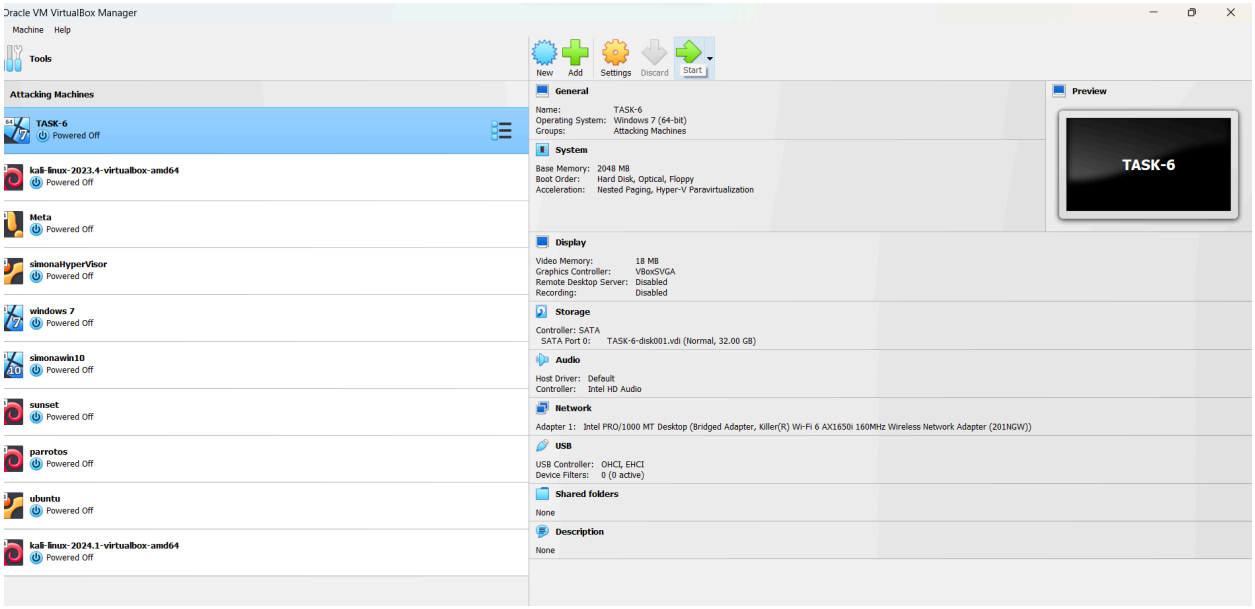
Method -1

Crack the system password

Using OPH-Crack Tool

Check the machine, if it consists of any files.

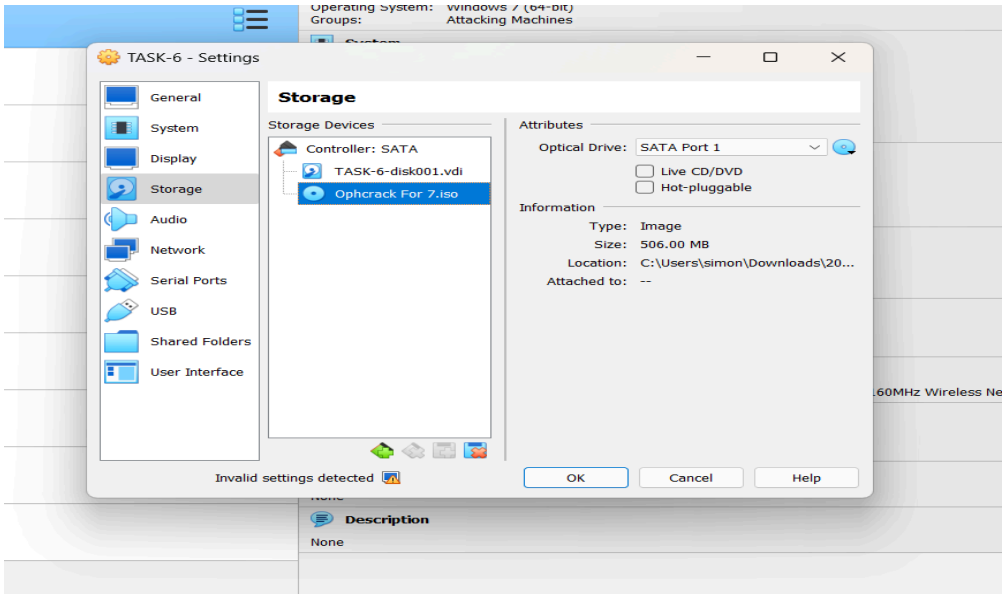
Step 1 : Go to the Virtual Machine and open the Task6 OS



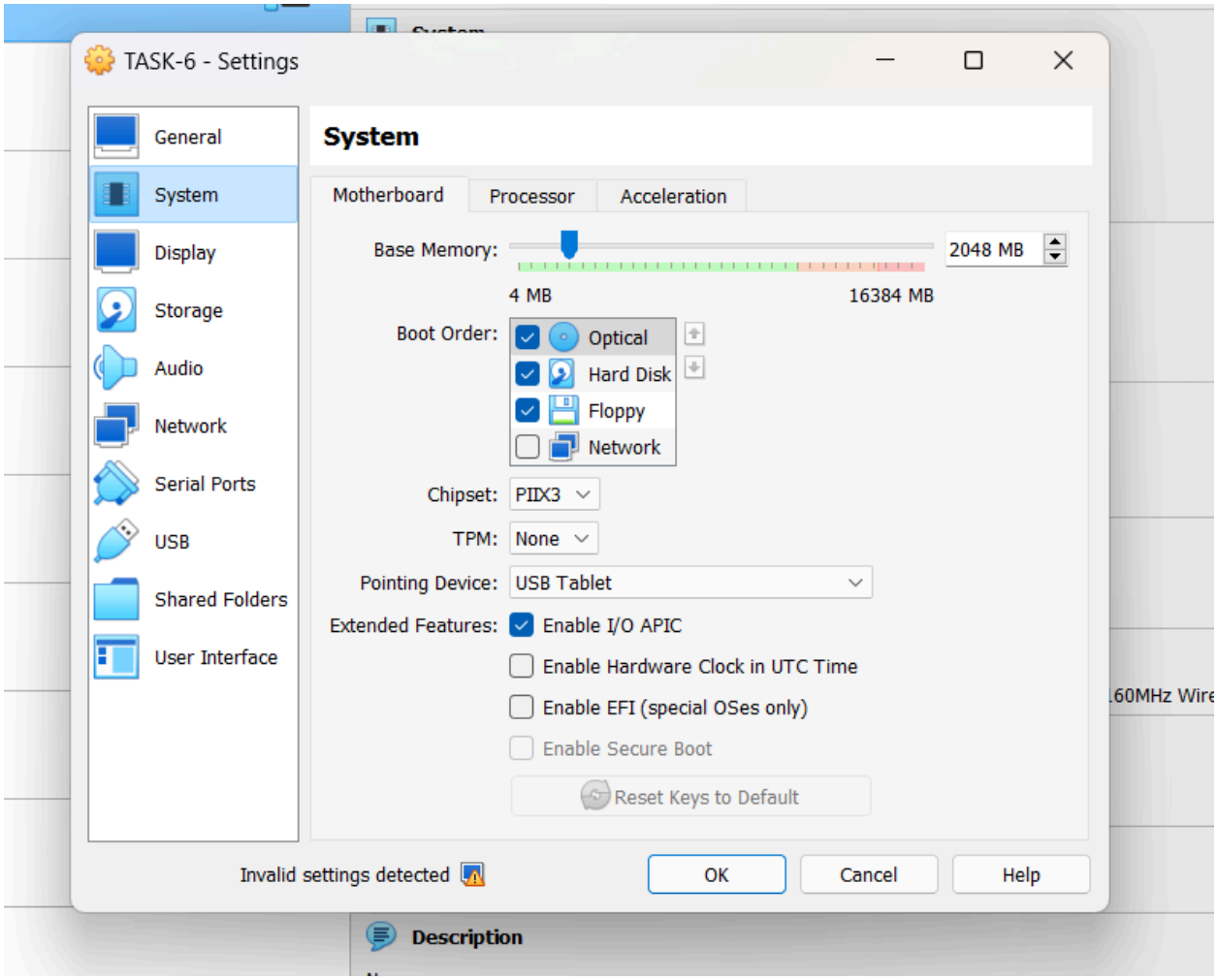
Step 2 : Once we open the machine we need to put the password, but since we are unaware about the password we need to crack the password using ophcrack

Step 3 : Shutdown this machine

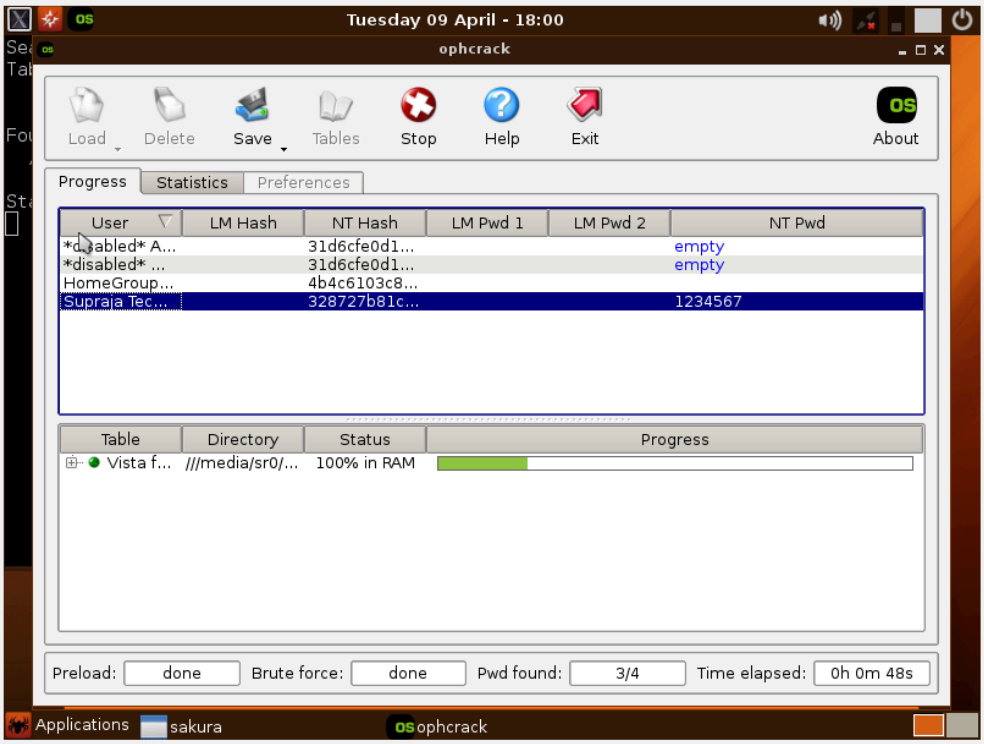
Step 4 : Go to the Virtual Machine and open settings and go to the storage tab, in the storage tab click on the empty and select the disk icon and put the OPH crack disk file in that



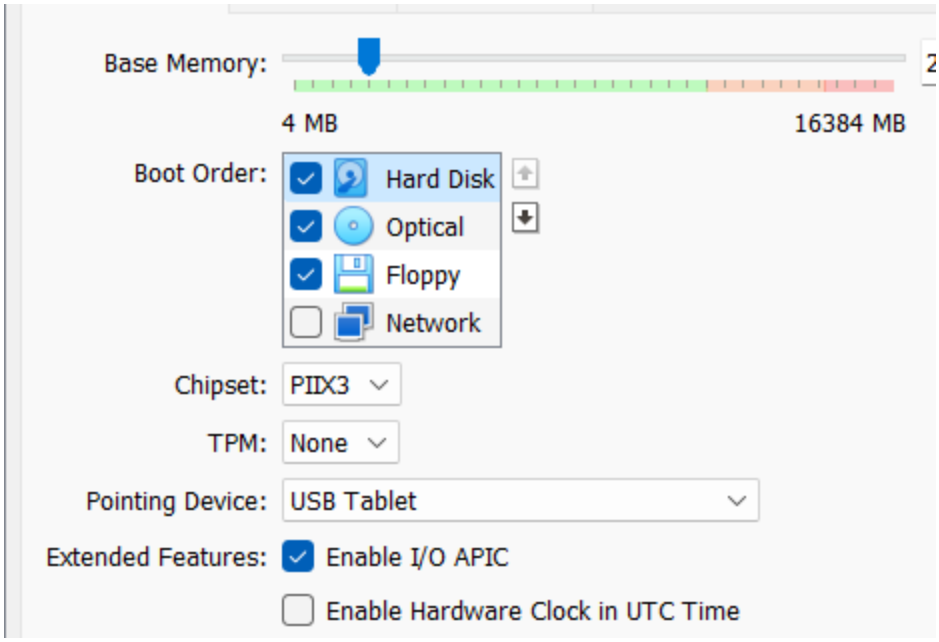
Step 5 : Then go to the system tab and select the optical file and click on upwards arrow and take the hard disk file down



Step 6 : Start the machine again, when you start the machine the oph tool will get open and in that we can see all the passwords



Step 7 : Then again shut down the machine, go to the storage tab remove the disk file and in the system tab again change the order to hard disk



Step 8 : Now we can start the machine and we have successfully cracked the password of the task6 ova file

C) Analysing the Checksums

Check the files in the system

Calculate the Checksums for it

Try to Identify the hidden data inside the Tampered document

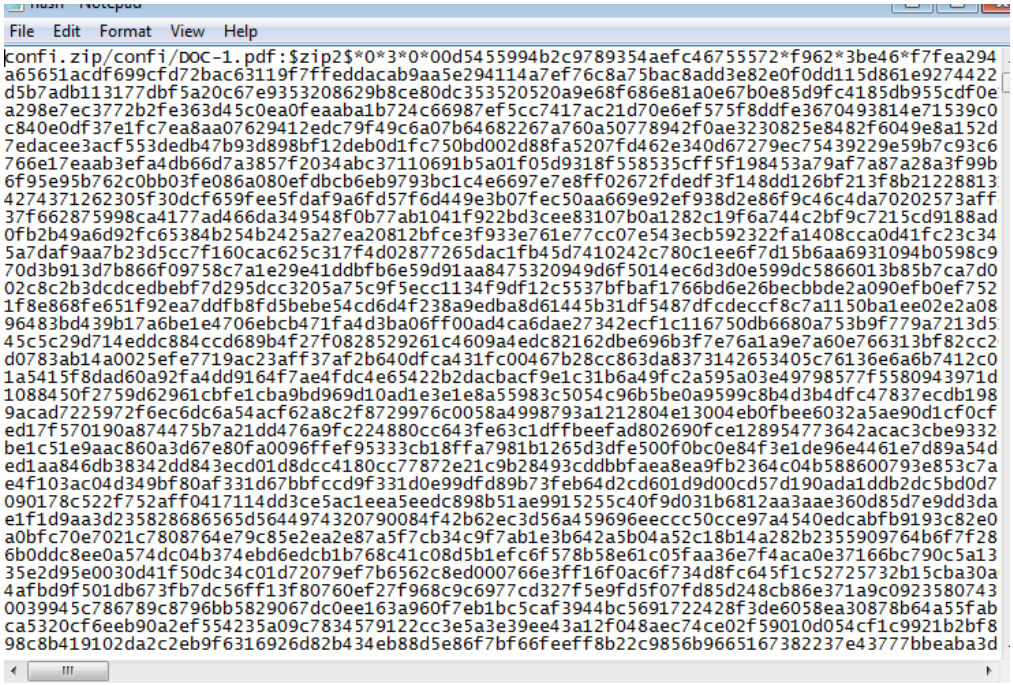
Identify the FLAG {*******}

Step 1: Open the Documents folder in the given machine

Step 2 : In the Documents folder we have confidential folder , open that confidential folder and extract it

Step 3: While extracting, it will ask for passwords to open that file

Step 4: We can get the password by using the tool JohntheRipper



```
File  Edit  Format  View  Help
confi.zip/confi/DOC-1.pdf:$zip2$*0*3*0*00d5455994b2c9789354aefc46755572*f962*3be46*f7fea294
a65651acdf699cfd72bac63119f7ffeddacab9aa5e294114a7ef76c8a75bac8add3e82e0f0dd115d861e9274422
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c840e0df37e1fc7ea8aa07629412edc79f49c6a07b64682267a760a50778942f0ae3230825e8482f6049e8a152d
7edacee3acf553dedb47b93d898bf12deb0d1fc750bd002d88fa5207fd462e340d67279ec75439229e59b7c93c6
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4274371262305f30dcf659fee5fdaf9a6fd57f6d449e3b07fec50aa669e92ef938d2e86f9c46c4da70202573aff
37f662875998ca4177ad466da349548f0b77ab1041f922bd3cee83107b0a1282c19f6a744c2bf9c7215cd9188ad
0fb2b49a6d92fc65384b254b2425a27ea20812bfce3f933e761e77cc07e543ecb592322fa1408cca0d41fc23c34
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090178c522f752aff0417114dd3ce5ac1eea5eedc898b51ae9915255c40f9d031b6812aa3aae360d85d7e9dd3da
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98c8b419102da2c2eb9f6316926d82b434eb88d5e86f7bf66feeff8b22c9856b9665167382237e43777bbeaba3d
```
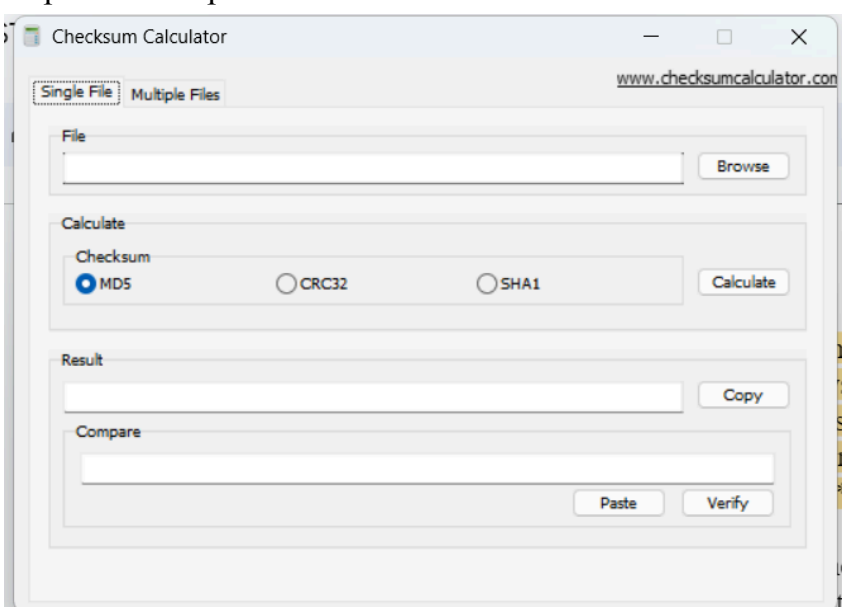
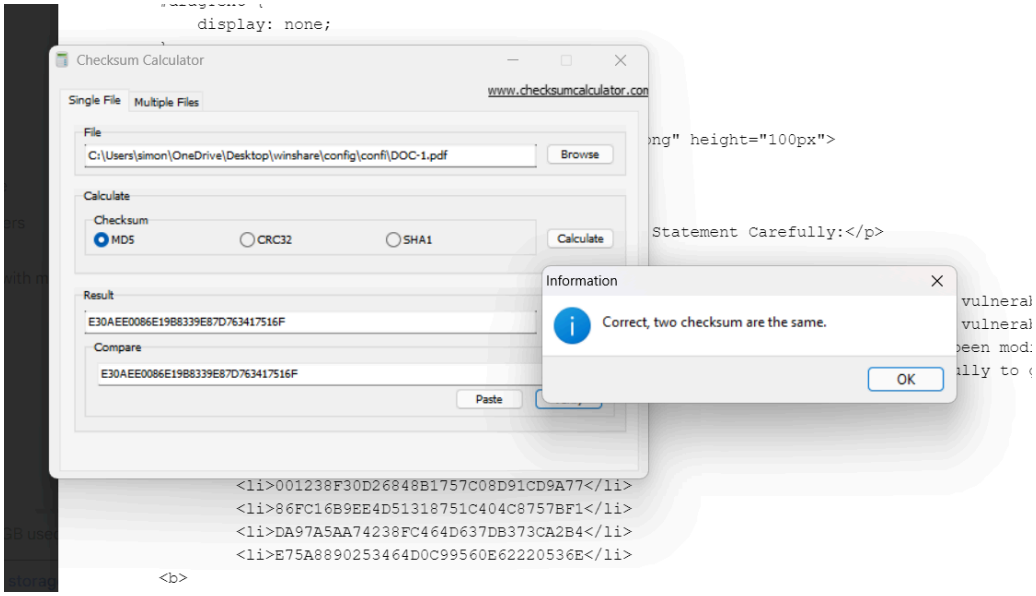

Step 5 : Once we have the passwords , we can open the documents

Step 6 : Now open the checksum calculator



Step 7 : Browser the documents and calculate the hash value , then go to the readme file give and copy the given hash values and put it compare and verify those, we will get the result where the file is tampered or no


display: none;
Checksum Calculator
www.checksumcalculator.com
Single File
Multiple Files
File
C:\Users\simon\OneDrive\Desktop\winshare\config\confi\DOC-1.pdf
Browse
Calculate
Checksum
MD5
CRC32
SHA1
Calculate
Result
E30AEE0086E19B8339E87D763417516F
Compare
E30AEE0086E19B8339E87D763417516F
Paste
Information
Correct, two checksum are the same.
OK
ng" height="100px">
Statement Carefully:</p>
001238F30D26848B1757C08D91CD9A77
86FC16B9EE4D51318751C404C8757BF1
DA97A5AA74238FC464D637DB373CA2B4
E75A8890253464D0C99560E62220536E
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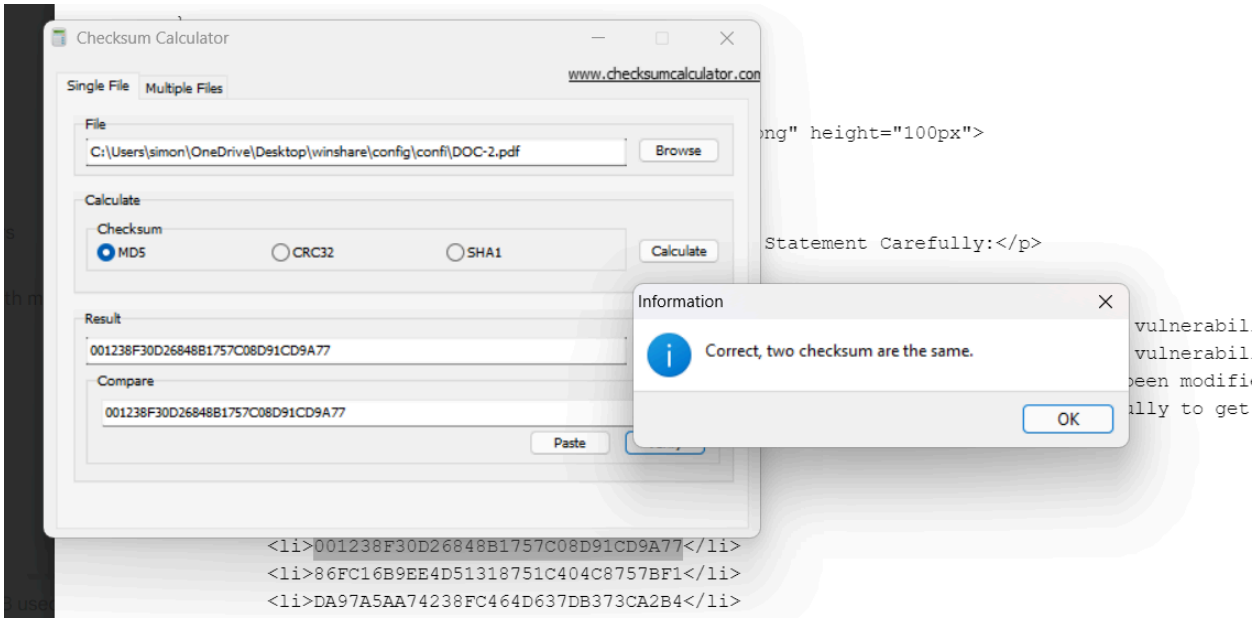
Checksum Calculator
www.checksumcalculator.com
Single File
Multiple Files
File
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Browse
Calculate
Checksum
MD5
CRC32
SHA1
Calculate
Result
001238F30D26848B1757C08D91CD9A77
Compare
001238F30D26848B1757C08D91CD9A77
Paste
Information
Correct, two checksum are the same.
OK
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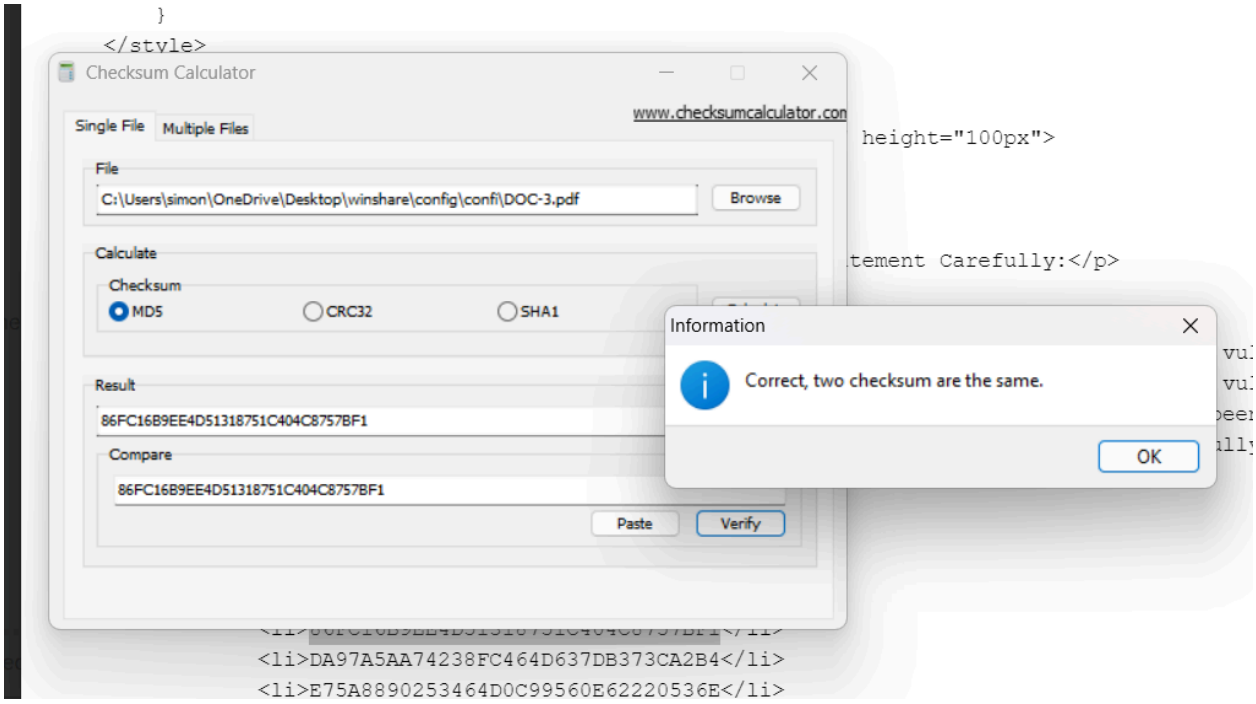
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</style>
Checksum Calculator
www.checksumcalculator.com
Single File
Multiple Files
File
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Browse
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Checksum
MD5
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Result
86FC16B9EE4D51318751C404C8757BF1
Compare
86FC16B9EE4D51318751C404C8757BF1
Paste
Verify
Information
Correct, two checksum are the same.
OK
DA97A5AA74238FC464D637DB373CA2B4
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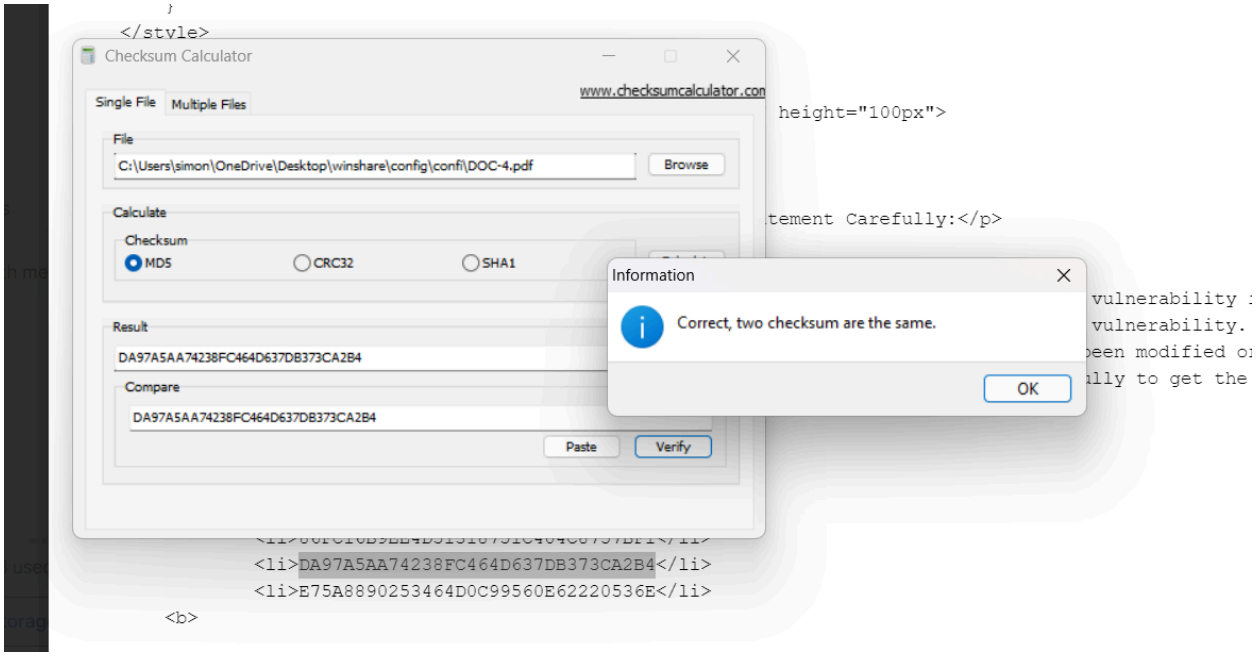
Checksum Calculator
www.checksumcalculator.com
Single File
Multiple Files
File
C:\Users\simon\OneDrive\Desktop\winshare\config\confi\DOC-4.pdf
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Information
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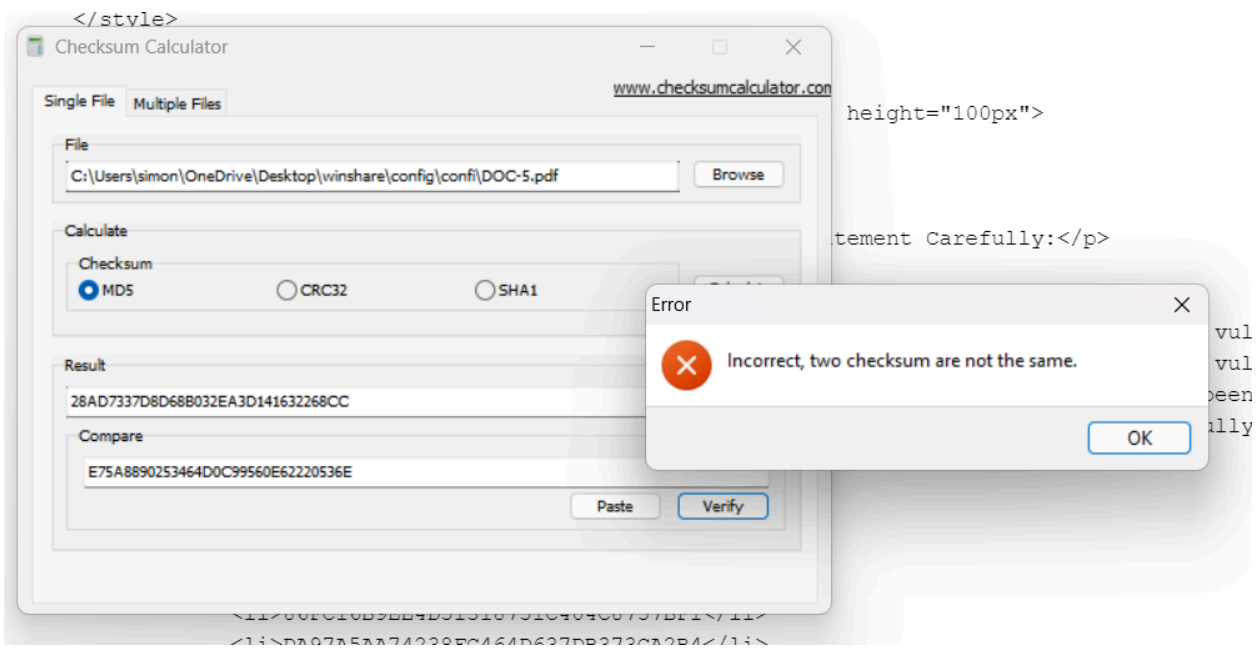
Checksum Calculator
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File
C:\Users\simon\OneDrive\Desktop\winshare\config\confi\DOC-5.pdf
Browse
Calculate
Checksum
MD5
CRC32
SHA1
Result
28AD7337D8D68B032EA3D141632268CC
Compare
E75A8890253464D0C99560E62220536E
Paste
Verify
Error
Incorrect, two checksum are not the same.
OK
</style>
height="100px">
tement Carefully:</p>