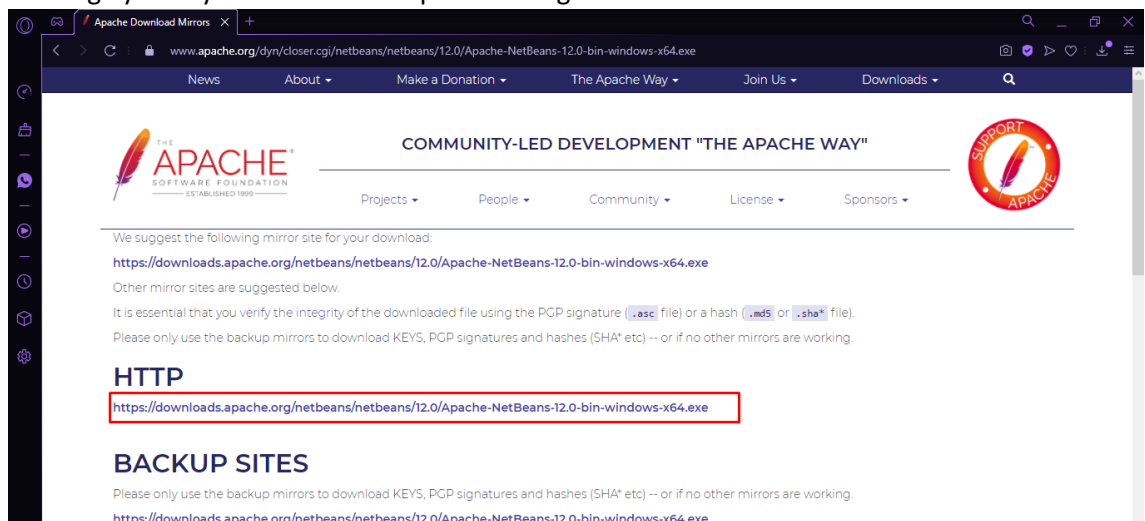
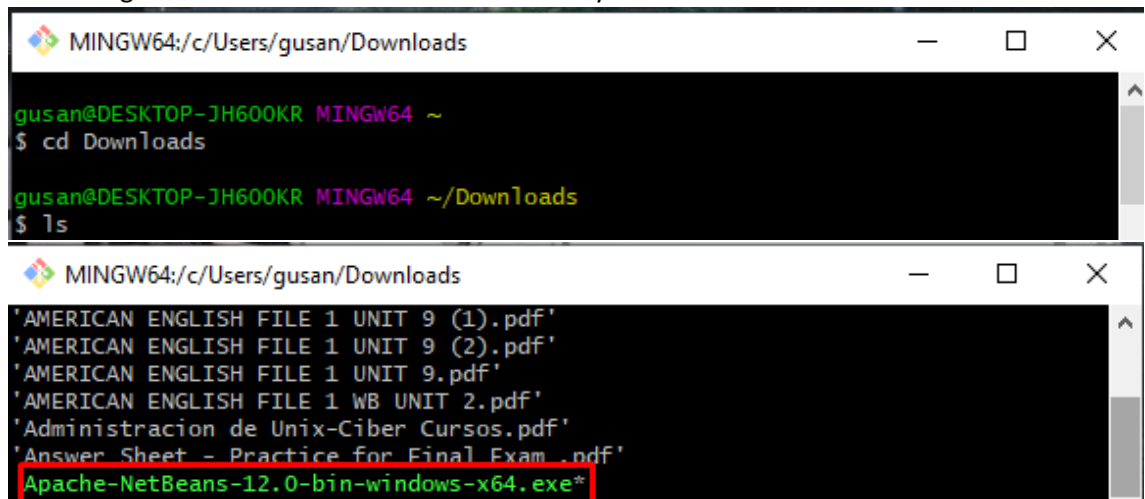


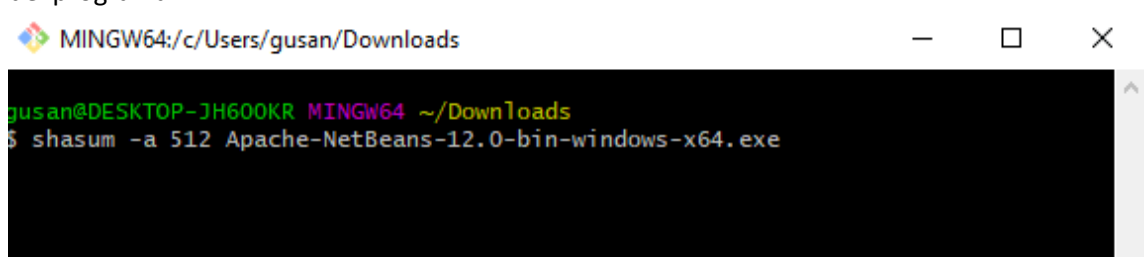
- Yo descargare la versión de apache netbeans para lo cual me dirijo a su pagina de descarga y le doy clic en su link http de descarga.



- Una vez ya descargado abro una terminal de "git bash" y me coloco en el lugar donde se descargó el archivo con los comandos de "cd" y "ls".



- Una vez ahí hacemos uso del comando "shasum -a 512" para que nos genere el Hash del programa.



```
MINGW64:/c:/Users/gusan/Downloads

gusan@DESKTOP-JH600KR MINGW64 ~/Downloads
$ shasum -a 512 Apache-NetBeans-12.0-bin-windows-x64.exe
525d61838c0cb82a6234bff1984b9886324eccdb0320875c639889e64299b1b621d01ca524ff0a77
0ac65ef05aad367722977066cf017369932c10f55992e90f *Apache-NetBeans-12.0-bin-windo
ws-x64.exe

gusan@DESKTOP-JH600KR MINGW64 ~/Downloads
$
```

Posteriormente para comprobar que sea el Hash tenemos que ir a la pagina del programa y darle clic en HASH 512 para que nos muestre el HASH correcto de este programa.

The image shows two browser windows. The top window is the Apache NetBeans 12.0 download page, which lists various download options including binaries, source code, and installers. The bottom window shows the specific SHA-512 hash page for the Windows x64 binary, with the hash value highlighted in a red box.

Apache NetBeans

Downloading Apache NetBeans 12.0

Apache NetBeans 12.0 was released on June 4, 2020. See [Apache NetBeans 12.0 Features](#) for a full list of features.

Apache NetBeans 12.0 is available for download from your closest Apache mirror.

- Binaries: [netbeans-12.0-bin.zip](#) (SHA-512, PGP ASC)
- Source: [netbeans-12.0-source.zip](#) (SHA-512, PGP ASC)
- Installers:
 - [Apache-NetBeans-12.0-bin-windows-x64.exe](#) (SHA-512, PGP ASC)
 - [Apache-NetBeans-12.0-bin-linux-x64.sh](#) (SHA-512, PGP ASC)
 - [Apache-NetBeans-12.0-bin-macosx.dmg](#) (SHA-512, PGP ASC)

Deployment platforms
Community approval
Known problems
Earlier releases

[https://downloads.apache.org/netbeans/netbeans/12.0/Apache-NetBeans-12.0-bin-windows-x64.exe.sha512](#)

525d61838c0cb82a6234bff1984b9886324eccdb0320875c639889e64299b1b621d01ca524ff0a770ac65ef05aad367722977066cf017369932c10f55992e90f ./Apache-NetBeans-12.0-bin-windows-x64.exe

Por último, solo tenemos que compararlos y si son idénticos es porque la descarga del programa fue la correcta y no tuve perdidas de ningún tipo.

The image shows a browser window displaying the SHA-512 hash for the downloaded file, with the hash value highlighted in a red box. Below the browser window, a terminal window shows the same hash value being calculated locally using the shasum command, also highlighted in a red box to show the match.

[https://downloads.apache.org/netbeans/netbeans/12.0/Apache-NetBeans-12.0-bin-windows-x64.exe.sha512](#)

525d61838c0cb82a6234bff1984b9886324eccdb0320875c639889e64299b1b621d01ca524ff0a770ac65ef05aad367722977066cf017369932c10f55992e90f ./Apache-NetBeans-12.0-bin-windows-x64.exe

```
MINGW64:/c:/Users/gusan/Downloads

gusan@DESKTOP-JH600KR MINGW64 ~/Downloads
$ shasum -a 512 Apache-NetBeans-12.0-bin-windows-x64.exe
525d61838c0cb82a6234bff1984b9886324eccdb0320875c639889e64299b1b621d01ca524ff0a77
0ac65ef05aad367722977066cf017369932c10f55992e90f *Apache-NetBeans-12.0-bin-windo
ws-x64.exe
```