

Needle In a Haystack Solution

Group Members:

- Kawang: /home/kawang/haystack/folder118/needle.txt
- Zach: ./folder302/needle.txt
- Xavier: ./folder280/needle.txt
- Toshaya: ./folder298/needle.txt

Goal Statement:

Locate or find the “needle.txt” file within the 500 folders within the haystack directory.

Steps to recreate:

1. Create a single haystack directory with 500 folders and 100 blank files within each folder.
 - a. `mkdir haystack && touch folder{1..500}/file{1..100}.txt`
 - i. Makes a directory named haystack and then generates folders 1-500 with files 1-100 within each
2. Generate the needle file
 - a. `$touch ./haystack/folder$(shuf -i 1-500 -n 1)/needle.txt`
 - i. `$()` is referencing a variable
 - ii. `-i` = rangeT
 - iii. `-n` = number of times

Answer:

1. `find ./ -name needle.txt`
 - a. The find commands allows one to locate a file within a specific path
 - b. `-name` options tells the command that the search is case sensitive
2. Alternative answer:

- a. `find /home/$USER/haystack/ -name needle.txt`
 - i. Works regardless of user
 - ii. **Note:** the command will not allow you to view a document from another user on the same PC.