Hi Everyone, Michael here.

Welcome to my walkthrough of my PicoCTF challenge Day 1.

So this challenge is created by the folks at Carnegie Mellon University designed primarily for high school students and people who are interested in Cybersecurity and Capture the Flag. You can follow them at www.picoctf.org.

Once you created a free account with them, you will have access to multiple picoGyms. Essentially these are tiles/blocks of exercises or gyms to learn foudational skills in relation to cybersecurity.

First tile that we will be working on is the "Obedient Cat" gym.

You can immediately see the window that will have information and description for the exercises. For this one, we are given with a simple description as the following: "This file has a flag in plain sight (aka "in-the-clear"). A link is given as well that will somehow download the flag for us. Flags are sets of texts that we aim to capture, or paste on our textbox and once you submit your flag and it correlates to the correct one, then you have solved the challenge.

What I'm going to do now is to download the file and save it on my local Virtual Machine.

You can also see further hints to assist you in solving the problem. What I found helpful at least for this exercise is Hint #3 where you are given with a linux terminal command called man cat which we will in a moment. Therefore the title **Obedient Cat** refers to the command executed on bash.

So opening our terminal we can run the command man cat. I like to think that this command refers to the manual for cat or concatenate command and it will show you the basic function and parameters you can use.

Cat refers to an operation to concantenate files and print on the standard output. One of its function is to project or display the content of a file, say a text file.

You got several examples here on how to perform the operation.

So let's jump back in to our terminal and try this command.

So what Im going to do is use cat and create a file called test.txt. Inside that file, I will concatenate or add or type in a series of phrases. Let's check first if the test.txt file exists, and we can verify that it is not yet there.

So we type in cat and redirect symbol for output, the greater than symbol. Once we enter that command in, we can further add texts inside the file. And then in order to close the file, you can use the hotkey, CTRL + D, D for delta and that will terminate the cat command.

We can now use cat to print and output for us the content of the test file. And from there we can see that the phrase we added and it was actually printed or shown to us in the terminal.

Now, moving on to the file called flag which downloaded moments ago, we can have a quick glance on its content again by using the cat command.

On the terminal, I typed in cat and then the file name called flag and there we go we have a text that seems to be the flag for this exercise.

I will be copying the content and verify if this is the one we are looking for.

Clicking the Submit Flag confirms to us that we have got the correct Flag and thus we have now captured the flag for this tile. Well done.

We gain 5 points for this exercise and we can continue to select other boxes to try. But that will be on for the next day.

For now we can bring into conclusion our challenge for the day.

In summary we have used cat command in linux terminal which can be used to read a file and we can use redirect to concatenate characters in a file.

The format is shown on the slide here and very simply we can use cat and then space and then the name of the file of interests to us.

Lastly, the importance of this exercise is for us to continue to explore further linux terminal commands. Navigating through the bash terminal is such a foundational skill needed for cyber security professional and something that we can continue to improve on the next few days.

That's it for today. We have now completed the first challenge for the PicoCTF from picoctf.org thank you and hope you have a good day.