

So, from main we understand we are looking for a 14-character password.

In the first called function after the 14 character check we understand the first 4 chars of the password have to match the 5214th character of the big string

Then, 1/0 happens, triggering signal error 8. Why does this matter? Because execution does not end, as in sub_1367 we find code that continue execution depending on the type of error triggered.

Next, we will want the 5079th character from the big array. And....

Here I stopped following the logic of the program because I noticed all functions in sub_1367 were the same, except one, which was clearly the final one as it told us if the password was sucesfully found.

I concluded this: We need the 5214th string of the big string 4 times, then the characters with indexes present in dword_5490: 5079, 4891, 5199, 5187, 4720 and 5071 then repeat the first 4 chars again (as that function is called right before the end of validation). This sums up to exactly 14 chars, meaning since the function were the same, we do not need to know the order they were called in.

I extracted the big string and made a quick python code to extract what we needed.

```
indices = [5214, 5079, 4891, 5199, 5187, 4720, 5071]
extracted_chars = [my_string[i] for i in indices if i < len(my_string)]
result = ''.join(extracted_chars)
print(result)
```

All we need to do to get the password is make sure the first printed char is used 4 times at the beginning and at the end. And we got the password! All that's left is to hash it to get the flag.

Made with love by: AndreiCat