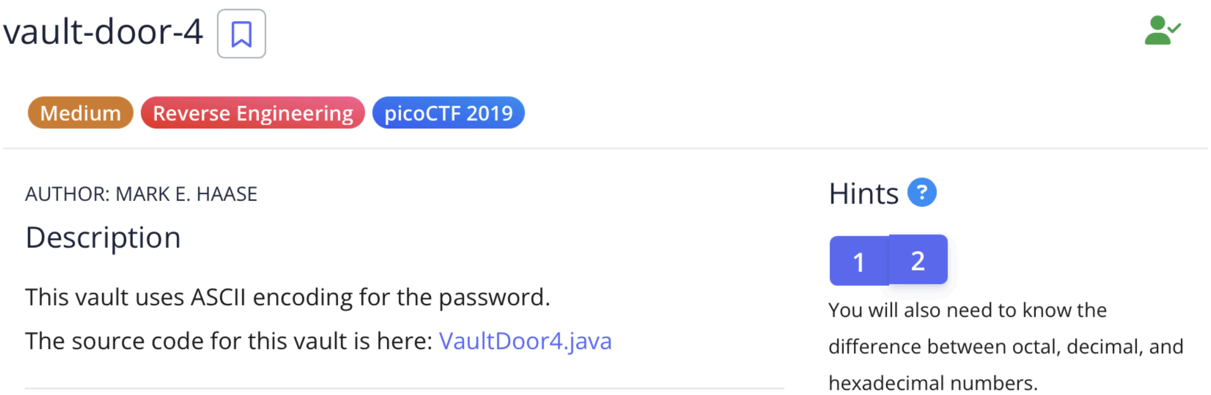


vault-door-4

Medium Reverse Engineering picoCTF 2019

AUTHOR: MARK E. HAASE

Description

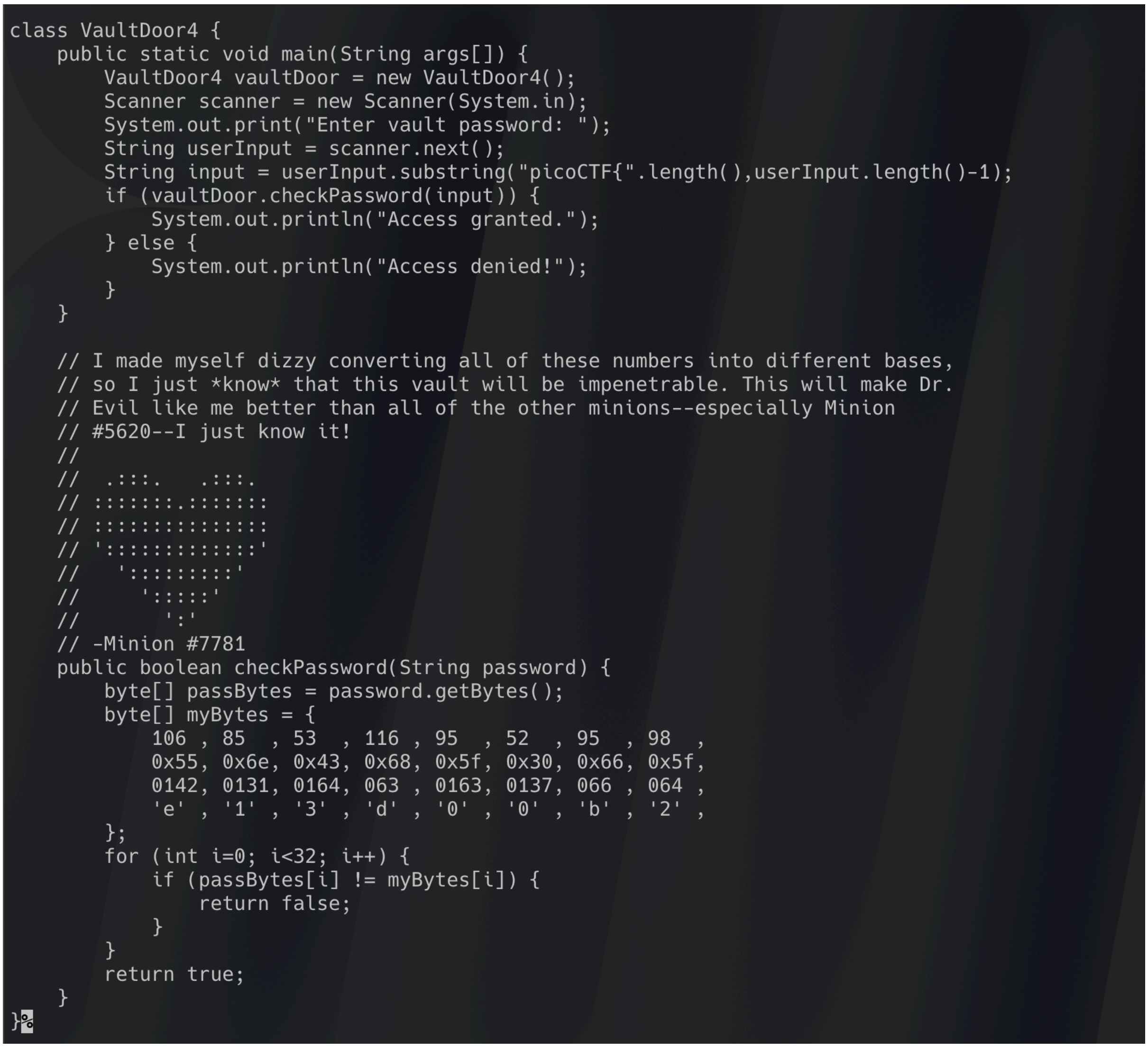
This vault uses ASCII encoding for the password.

The source code for this vault is here: VaultDoor4.java

Hints ?

You will also need to know the difference between octal, decimal, and hexadecimal numbers.

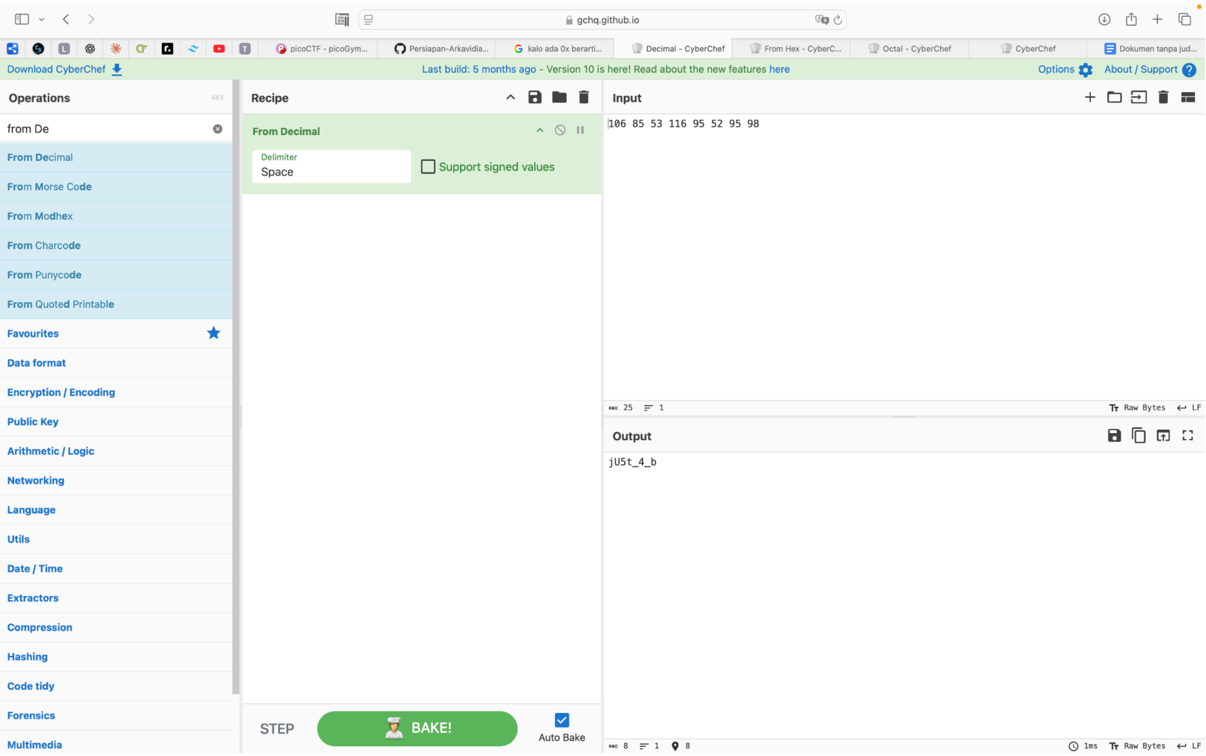
Jika file VaultDoor4.java di cat, hasilnya seperti ini. Kita bisa lihat terdapat logic validasi password yang harus sama seperti pada value myBytes dalam fungsi checkPassword().



```
class VaultDoor4 {
    public static void main(String args[]) {
        VaultDoor4 vaultDoor = new VaultDoor4();
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter vault password: ");
        String userInput = scanner.next();
        String input = userInput.substring("picoCTF{".length(),userInput.length()-1);
        if (vaultDoor.checkPassword(input)) {
            System.out.println("Access granted.");
        } else {
            System.out.println("Access denied!");
        }
    }

    // I made myself dizzy converting all of these numbers into different bases,
    // so I just *know* that this vault will be impenetrable. This will make Dr.
    // Evil like me better than all of the other minions--especially Minion
    // #5620--I just know it!
    //
    //  .:::.   .:::.
    // :::::::.:::::::
    // :::::::::::::::
    // ':::::::::::::'
    //   ':::::::::'
    //     ':::::'
    //       ':'
    // -Minion #7781
    public boolean checkPassword(String password) {
        byte[] passBytes = password.getBytes();
        byte[] myBytes = {
            106 , 85  , 53  , 116 , 95  , 52  , 95  , 98  ,
            0x55, 0x6e, 0x43, 0x68, 0x5f, 0x30, 0x66, 0x5f,
            0142, 0131, 0164, 063 , 0163, 0137, 066 , 064 ,
            'e' , '1' , '3' , 'd' , '0' , '0' , 'b' , '2' ,
        };
        for (int i=0; i<32; i++) {
            if (passBytes[i] != myBytes[i]) {
                return false;
            }
        }
        return true;
    }
}%
```

Decode isi dari tiap baris mybytes seperti berikut.



from De

From Decimal

Delimiter: Space

□ Support signed values

Input

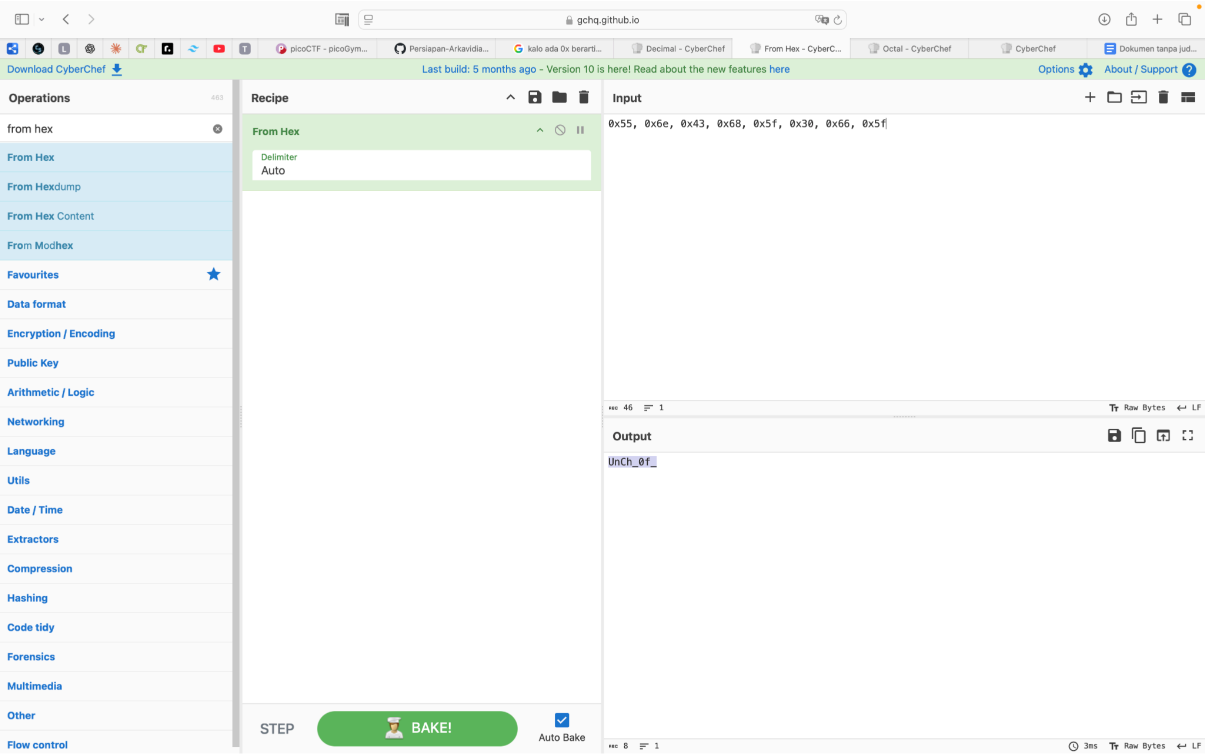
```
106 85 53 116 95 52 95 98
```

25 1

Output

```
jU5t_4_b
```

8 1 8 1ms



from hex

From Hex

Delimiter: Auto

Input

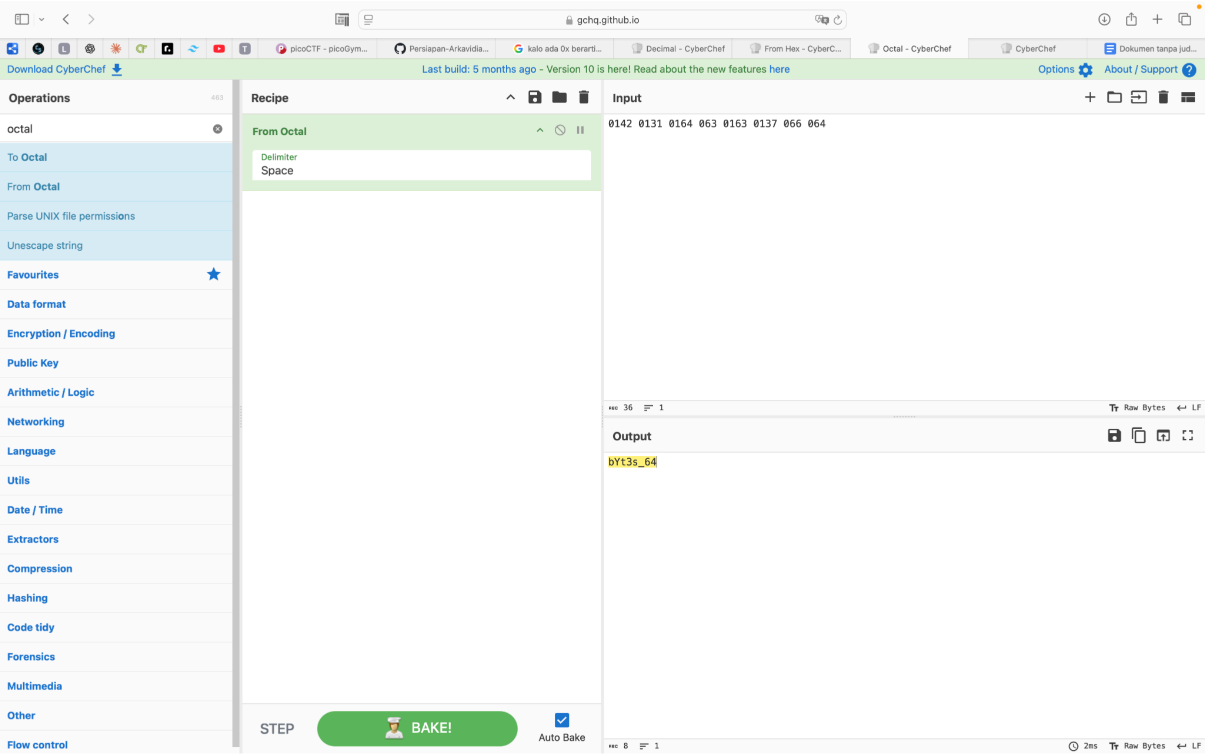
```
0x55, 0x6e, 0x43, 0x68, 0x5f, 0x30, 0x66, 0x5f
```

46 1

Output

```
UnCh_0f_
```

8 1 3ms



From Octal

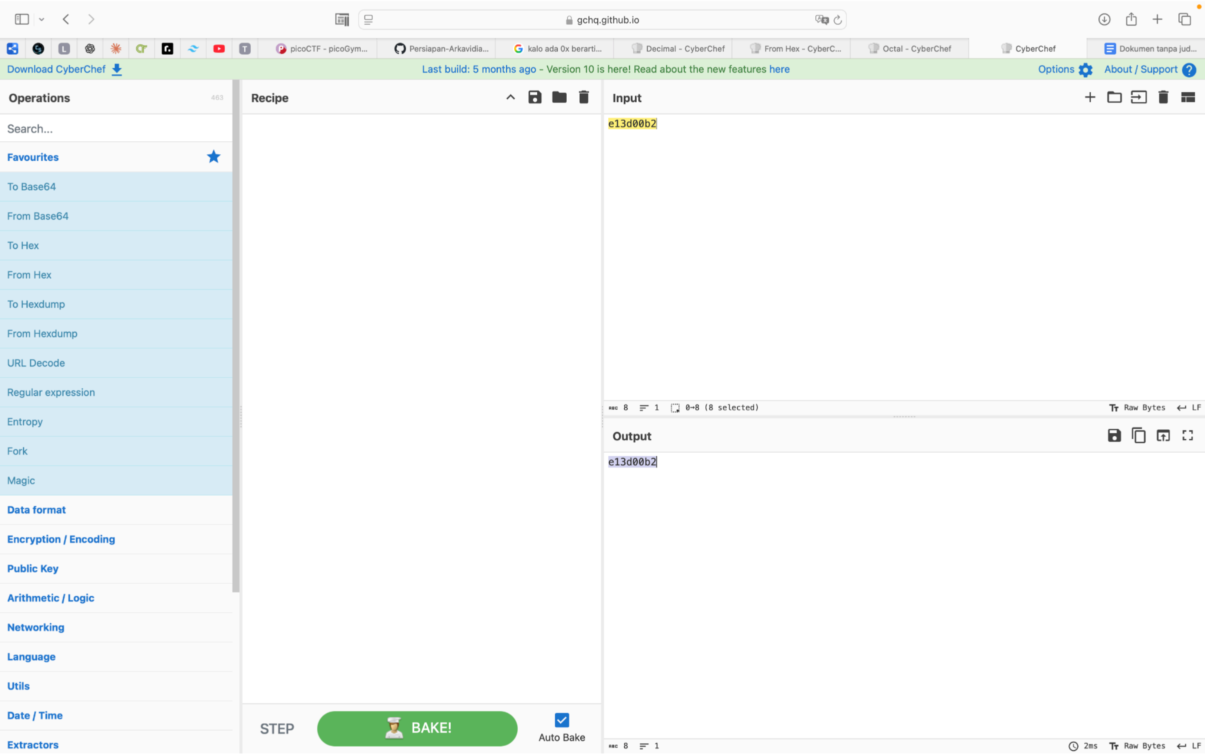
Delimiter
Space

Input

```
0142 0131 0164 063 0163 0137 066 064
```

Output

```
bYt3s_64
```



Input

```
e13d00b2
```

Output

```
e13d00b2
```

Flag tinggal disambung saja.