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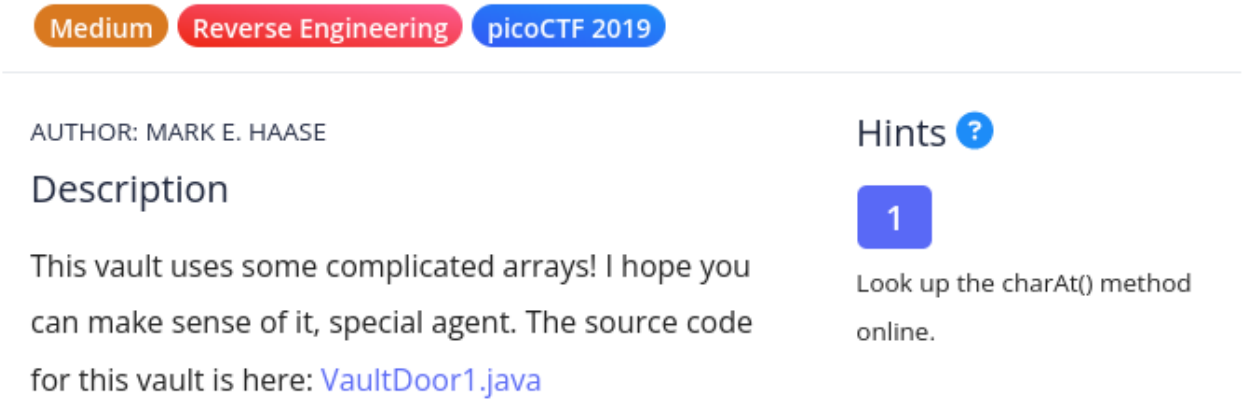
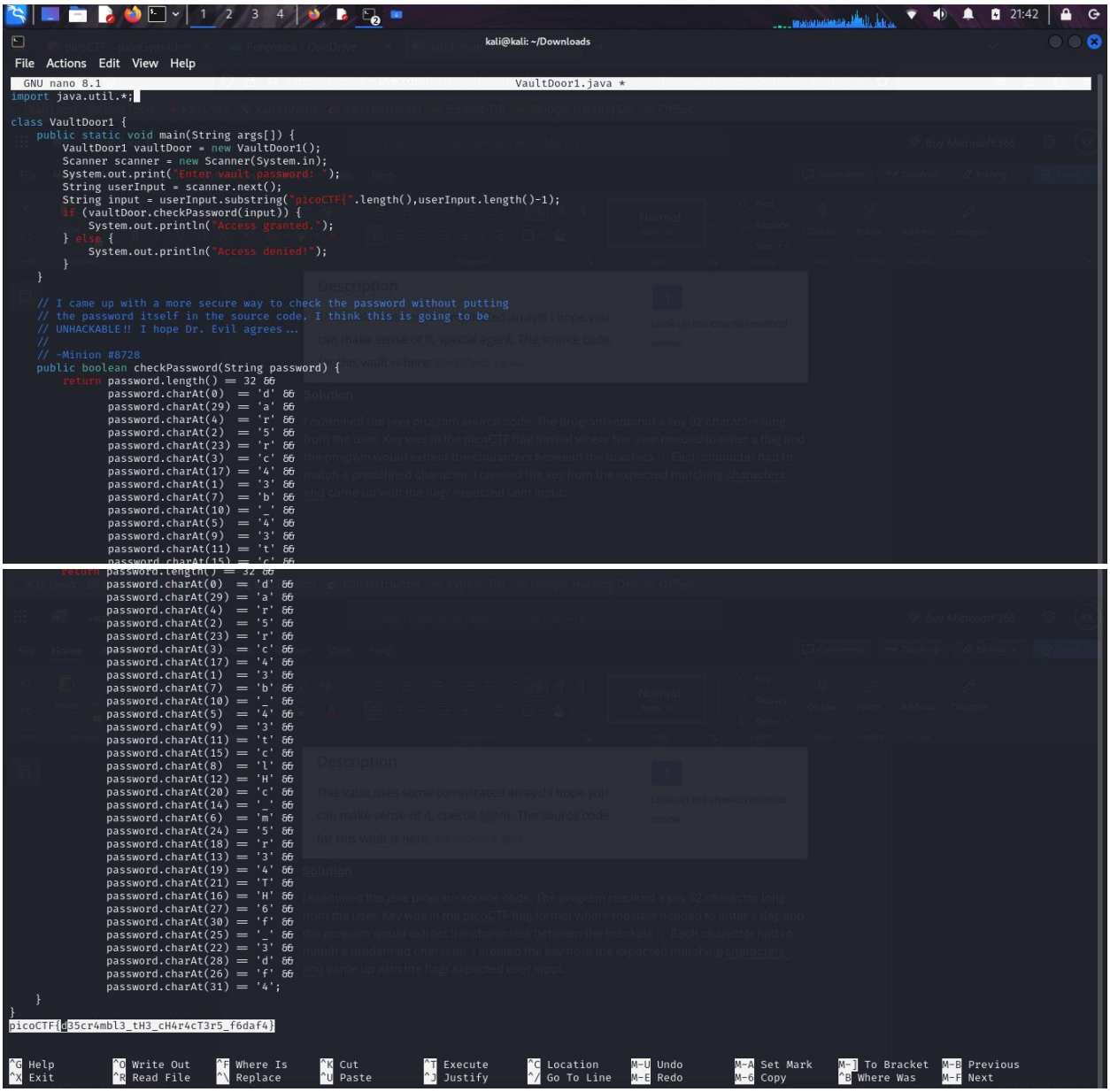


Solution

I examined the java program source code. The program required a key 32 character long from the user. Key was in the picoCTF flag format where the user needed to enter a flag and the program would extract the characters between the brackets {}. Each character had to match a predefined character. I created the key from the expected matching characters and came up with the flag/ expected user input picoCTF{od35cr4mbl3_tH3_cH4r4cT3r5_f6daf4}


kali@kali: ~/Downloads
File Actions Edit View Help
GNU nano 8.1 VaultDoor1.java *
import java.util.*;
class VaultDoor1 {
public static void main(String args[]) {
VaultDoor1 vaultDoor = new VaultDoor1();
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 came up with a more secure way to check the password without putting
// the password itself in the source code. I think this is going to be
// UNHACKABLE!! I hope Dr. Evil agrees...
//
// -Minion #8728
public boolean checkPassword(String password) {
return password.length() == 32 &&
password.charAt(0) == 'd' &&
password.charAt(29) == 'a' &&
password.charAt(4) == 'r' &&
password.charAt(2) == '5' &&
password.charAt(23) == 'r' &&
password.charAt(3) == 'c' &&
password.charAt(17) == '4' &&
password.charAt(1) == '3' &&
password.charAt(7) == 'b' &&
password.charAt(10) == '_' &&
password.charAt(5) == '4' &&
password.charAt(9) == '3' &&
password.charAt(11) == 't' &&
password.charAt(15) == 'c' &&
password.charAt(8) == 'l' &&
password.charAt(12) == 'H' &&
password.charAt(20) == 'c' &&
password.charAt(14) == '_' &&
password.charAt(6) == 'm' &&
password.charAt(24) == '5' &&
password.charAt(18) == 'r' &&
password.charAt(13) == '3' &&
password.charAt(19) == '4' &&
password.charAt(21) == 'T' &&
password.charAt(16) == 'H' &&
password.charAt(27) == '6' &&
password.charAt(30) == 'f' &&
password.charAt(25) == '_' &&
password.charAt(22) == '3' &&
password.charAt(28) == 'd' &&
password.charAt(26) == 'f' &&
password.charAt(31) == '4';
}
}
picoCTF{d35cr4mbl3_tH3_cH4r4cT3r5_f6daf4}
^G Help ^O Write Out ^F Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark M-] To Bracket M-B Previous
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^/ Go To Line M-E Redo M-6 Copy ^B Where Was M-F Next