

## Lab05

### **Which passwords were found and how quickly?**

John the Ripper quickly found Password1, qwerty123, letmein, and Summer2024. All within a few seconds, since they are common words that appear in dictionary lists.

### **Which strong password did the program not find? Why?**

The password My\$Strong&Pass2024 was not found because it is long, includes uppercase and lowercase letters, numbers, and special symbols, and does not appear in the common wordlist used by the program.

### **How does the security score increase as you increase the length?**

Password strength increases exponentially with each additional character. A longer password dramatically raises the number of possible combinations, making brute-force or dictionary attacks much slower.

### **How do special characters affect the score?**

Special characters add complexity and increase the number of possible combinations, which makes the password harder to guess or find in pre-built wordlists.

### **How is a “passphrase” scored compared to a classic password?**

A passphrase is usually much longer and easier to remember, which gives it a higher security score. For example, BlueTigerEatsPizza is more secure than a short password like P@ss12! because of its length.

### **Which password would you recommend for everyday use and why?**

I would recommend using a long passphrase (at least 12–16 characters) that combines random words, numbers, and symbols for example:

Sunny\$River\_Books2025

It's both strong and memorable, offering excellent protection against brute-force and dictionary attacks.