

# Spondon Nath

## **How Password Complexity Affects Security?**

Password complexity plays a huge role in how secure a password really is. During my testing on PasswordMeter, I found that weak passwords like `sbn@123` scored low because they were too short, had no upper case letters, and were common patterns.

When I made the password longer, included symbols, used a combination of lower and upper case letters, and skipped common sequences, the strength rating increased significantly. My safest password, `qwerty@2K25`, rated 95% and was labeled very strong, primarily due to the fact that it satisfied all the complexity criteria and had an adequate combination of character types.

In terms of security, it takes a very long time to break sophisticated passwords with dictionary or brute-force attacks. A weak password can be broken in seconds, but a secure password could take years or decades. This drill made me realize that slight variations like inserting a symbol or capital letter can contribute significantly to the effort that is put into guessing or breaking a password.