Question 1: Guessing Passwords   What is the attacker's chance of guessing an 8-character password, made up of only printable characters (excluding spaces). Hint: We have 52 alphabetic characters, 10 numeric, 32 additional printable characters excluding spaces.

Question 2: Brute Force Guessing   If there are 2^{53} possible passwords, how long will it take, on average, for the attacker to guess the right one assuming the attacker can try 10,000 passwords per second

Question 3: Password Requirements   Password requirements (e.g., must be at least 8 characters and contain special characters)...

○ Increase the set of possible passwords, and increase the set of likely passwords an attacker must try in a brute-force attack.

○ Increase the set of possible passwords, but decrease the set of likely passwords an attacker must try in a brute-force attack.

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