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import java.security.MessageDigest;
import java.security.SecureRandom;
import java.util.Base64;

public class DictionaryAttackProtection {
    public static void main(String[] args) throws Exception {
        String password = "mySecret123";
        byte[] salt = new byte[16];
        SecureRandom.getInstanceStrong().nextBytes(salt);

        // Combine password + salt and hash it
        MessageDigest md = MessageDigest.getInstance("SHA-256");
        md.update(salt);
        byte[] hash = md.digest(password.getBytes());

        // Show outputs
        System.out.println("Salt: " + Base64.getEncoder().encodeToString(salt));
        System.out.println("Hashed Password: " +
Base64.getEncoder().encodeToString(hash));
    }
}
```