*Dear Sir/Madam*

*I am trying to crack all the leaked hashes,I found several vulnerabilities in your password policy and this email concludes all the findings & suggestions to improve your password policy.*

*Secure Hash Algorithm(SHA) and Message Digest(MD5) are the standard cryptographic hash functions to provide data security for authentication.*

*All the password which are compromised were using MD5 which is a weaker hash algorithm and is prone to collisions. It was very easy to crack with Hashcat.com and rockyou.txt wordlist via terminal and web browsers.*

*I would suggest that you use a very strong password encryption mechanism that create hashes for password based on SHA.After cracking the passwords,we find the following things about organisation’s password policy:*

* *Minimum length for password is set to 6.*
* *There is no specific requirement for the password creation. Users can use any combination of word & letters to create a password.*

*You can include several new things in your password policy. My recommendations are:*

* *Avoid common words and character combinations in your password.*
* *Longer passwords are better, 8 characters is a starting point.*
* *Don’t reuse your passwords.*
* *Include special character, Capital and Small letters, numbers in your password.*
* *Don’t let users include their username, actual name, date of birth and other personal information while creating a password.*
* *Train your users to follow these policies to keep their passwords safe.*

**Security Algorithms used:**

*experthead:e10adc3949ba59abbe56e057f20f883e – MD5*

*interestec:25f9e794323b453885f5181f1b624d0b – MD5 ortspoon:d8578edf8458ce06fbc5bb76a58c5ca4 –MD5 reallychel:5f4dcc3b5aa765d61d8327deb882cf99 –MD5 simmson56:96e79218965eb72c92a549dd5a330112 – MD5 bookma:25d55ad283aa400af464c76d713c07ad – MD5 popularkiya7:e99a18c428cb38d5f260853678922e03 – MD5* *eatingcake1994:fcea920f7412b5da7be0cf42b8c93759 – MD5 heroanhart:7c6a180b36896a0a8c02787eeafb0e4c – MD5 edi\_tesla89:6c569aabbf7775ef8fc570e228c16b98 – MD5 liveltekah:3f230640b78d7e71ac5514e57935eb69 – MD5 blikimore:917eb5e9d6d6bca820922a0c6f7cc28b – MD5 johnwick007:f6a0cb102c62879d397b12b62c092c06 – MD5 flamesbria2001:9b3b269ad0a208090309f091b3aba9db – MD5 oranolio:16ced47d3fc931483e24933665cded6d - MD5 spuffyffet:1f5c5683982d7c3814d4d9e6d749b21e - MD5 moodie:8d763385e0476ae208f21bc63956f748 - MD5 nabox:defebde7b6ab6f24d5824682a16c3ae4 - MD5 bandalls:bdda5f03128bcbdfa78d8934529048cf - MD5*

**Cracked Passwords:**

*experthead:e10adc3949ba59abbe56e057f20f883e - 123456 interestec:25f9e794323b453885f5181f1b624d0b - 123456789 ortspoon:d8578edf8458ce06fbc5bb76a58c5ca4 - qwerty reallychel:5f4dcc3b5aa765d61d8327deb882cf99 - password simmson56:96e79218965eb72c92a549dd5a330112 - 111111 bookma:25d55ad283aa400af464c76d713c07ad - 12345678 popularkiya7:e99a18c428cb38d5f260853678922e03 - abc123 eatingcake1994:fcea920f7412b5da7be0cf42b8c93759 - 1234567 heroanhart:7c6a180b36896a0a8c02787eeafb0e4c - password1 edi\_tesla89:6c569aabbf7775ef8fc570e228c16b98 - password! liveltekah:3f230640b78d7e71ac5514e57935eb69 - qazxsw blikimore:917eb5e9d6d6bca820922a0c6f7cc28b - Pa$$word1 johnwick007:f6a0cb102c62879d397b12b62c092c06 – bluered*

*Thanking you,*

*Name: G.Anusha*

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