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A WEBCOMIC OF ROMANCE,
 SARCASM, MATH, AND LANGUAGE.

BLACK LIVES MATTER



HOW TO HELP

PASSWORD STRENGTH

|< < PREV RANDOM NEXT > >|

UNCOMMON (NON-GIBBERISH) BASE WORD ORDER UNKNOWN

Tr0ub4dor &3

CAPS? COMMON SUBSTITUTIONS NUMERAL PUNCTUATION

(YOU CAN ADD A FEW MORE BITS TO ACCOUNT FOR THE FACT THAT THIS IS ONLY ONE OF A FEW COMMON FORMATS.)

~28 BITS OF ENTROPY

$2^{28} = 3 \text{ DAYS AT } 1000 \text{ GUESSES/SEC}$

(PLAUSIBLE ATTACK ON A WEAK REMOTE WEB SERVICE. YES, CRACKING A STOLEN HASH IS FASTER, BUT IT'S NOT WHAT THE AVERAGE USER SHOULD WORRY ABOUT.)

DIFFICULTY TO GUESS:
EASY

WAS IT TROMBONE? NO, TROUBADOR. AND ONE OF THE 0s WAS A ZERO?

AND THERE WAS SOME SYMBOL...

DIFFICULTY TO REMEMBER:
HARD

correct horse battery staple

FOUR RANDOM COMMON WORDS

~44 BITS OF ENTROPY

$2^{44} = 550 \text{ YEARS AT } 1000 \text{ GUESSES/SEC}$

DIFFICULTY TO GUESS:
HARD

THAT'S A BATTERY STAPLE.

CORRECT!

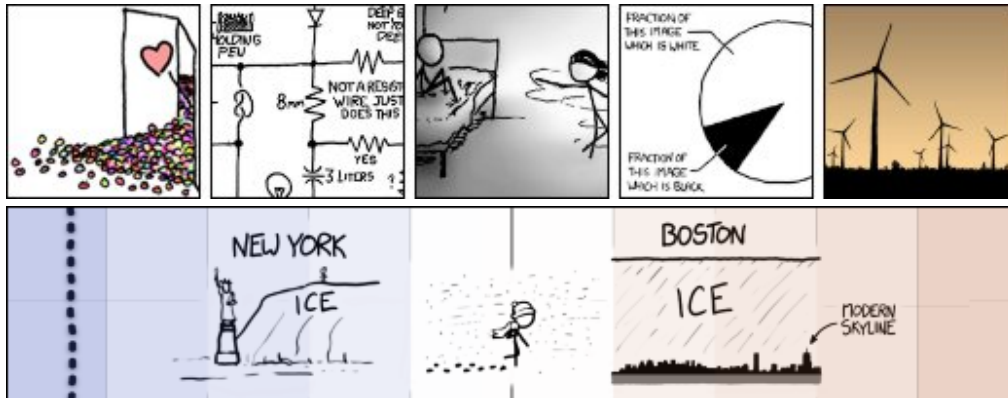
DIFFICULTY TO REMEMBER:
 YOU'VE ALREADY MEMORIZED IT

THROUGH 20 YEARS OF EFFORT, WE'VE SUCCESSFULLY TRAINED EVERYONE TO USE PASSWORDS THAT ARE HARD FOR HUMANS TO REMEMBER, BUT EASY FOR COMPUTERS TO GUESS.

|< < PREV RANDOM NEXT > >|

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