## Password Creation Tips

In conjunction with using the following password creation tips, it is important to remember that all passwords should contain a special symbol (e.g., "\#", "\$", "@" or whatever special characters the system permits in passwords) in the first five characters, unless the application or operating system does not allow the use of special characters. If special characters cannot be used then a combination of upper and lower case letters as well as numbers should be employed.

1. Create a phonetic sentence using the pronounced sounds of the letters, numbers, or special characters.

Examples:
I1OD-24GET "1 tend to forget."
RU?LOSTIM "Are you lost I am!"
187\#2DAY? "I ate seven pounds today."
2. Concatenate short, unrelated words with numbers or other characters in between.

| GO\$CATSAY | BEES\&PAWS |
| :--- | :--- |
| W1N>TER60OF | AND\%BLACK13 |
| GRAY*POUR | CAT\#2HAT |

3. Use the first letter of each word in a poem or song until you have enough letters (e.g., at least six).
```
JAJ^WUTH "Jack and Jill went up the hill"
HINS.NJA "Help! I need somebody. Not just anybody"
```

4. Mirror a word (in either direction); repeat process or truncate letters as needed to get appropriate length.
```
GUST-TSUG FL@AREERA
BOY!YOB!BOY FILLOLLIF
```

5. Use every other letter in a phrase until you have enough letters.
```
NW[S]HTMFR "Now is the time for all..."
TB:ONTOEH "To be or not to be, that..."
```

6. Take someone else's full name that you can easily remember. Divide it into segments or blocks of the length you need for your password. You may rotate back through the name again if you need additional letters or truncate any extra letters. Drop the first block. Use any other block that is not an exact match for a proper name or word.
"John Quincy Adams"
"Alexander Graham Bell"

| JOHNQULN (Drop) | CY-ADAMS-J (Keep) |
| :--- | :--- |
| ALEXANDE (Drop) | ER\&GRAHAM (Keep) |

7. Take a word from the dictionary that is long enough to qualify as a password. Replace some or all of the vowels with numbers or special characters (e.g., "\#", "\$", "@", or whatever special characters the system permits in passwords).

| Mornings | M\$RN\$GS |
| :--- | :--- |
| Psychotic | PS\#CH\#T\#C |
| Beancounter | BE\$NCO\$NT\$R |

8. This one creates difficult passwords. Using the telephone keypad (but assigning "Q" and " $T$ ' to the number "I") as shown, choose a number you can easily remember and translate it into letters. If your number includes a zero, just keep the " 0 " as the character for your password. You will note that for each number (except zero) you will have at least two letter choices.

| $1234 \# 5678$ | QADI\#LORT or ZBEH\#KNRU |
| :--- | :--- |
| $24 * 689753$ | CI*MUXRLE or AG*MTWPJD |
| $100 \# 78699$ | ZOO\#STOVVY or QOO\#RUNXX |

9. Take a word from the dictionary (or a proper name you like) that is long enough to qualify as a password. Put all of the vowels together and all of the consonants together.
```
Friends IE:FRNDS
Douglas OUA&DGLS
```

These techniques may help users to invent techniques of their own. Just using a technique of some sort improves one's ability to memorize a password.

Passwords, of course, must not be written down or stored where someone might discover them. Moreover, as good as the examples used here are, users should not adopt them as their own. They will probably find their way into some password-cracking dictionary.

