

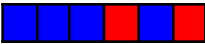
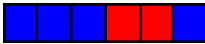
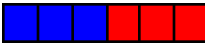
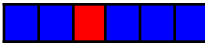
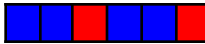
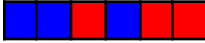
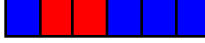
Binary Name Key Chain

Materials:

55" (ish) of beading lacing 55" should be sufficient for a person with roughly 6 letters in their first name and 6 in their last. If someone has more than 12 letters between their first and last name, they should consider cutting a longer length of lacing.		\$2.77 @ Hobby Lobby for a 100 yard spool (enough for about 72 keychains, give or take) ***Pony Bead Lacing will work as well (and probably better), though it'll probably be more expensive.
25-50 pony beads, all the same color (and size) Exact # will depend on length of name and # of 1's and 0's		\$2.99 @ Hobby Lobby for a bag of 300-360 (depending on color)
25-50 pny beads, all the same color and size, but a different color from the 1st set of beads.		\$2.99 @ Hobby Lobby for a bag of 300-360 (depending on color)
Key Ring		\$2.99 @ Hobby Lobby for a bag of 30 key rings (24mm)

Binary Instructions:

Use the following table to determine your binary values for each letter of your name:

Space  (0)	A  (1)	B  (2)	C  (3)	D  (4)
E  (5)	F  (6)	G  (7)	H  (8)	I  (9)
J  (10)	K  (11)	L  (12)	M  (13)	N  (14)
O  (15)	P  (16)	Q  (17)	R  (18)	S  (19)
T  (20)	U  (21)	V  (22)	W  (23)	X  (24)
Y  (25)	Z  (26)	-  (27)	'  (28)	Special Symbol  (29)

Blue: 0

Red: 1

Notice, with the example to the right, using John Smith, we'll need 39 Blue Beads and 21 Red Beads.

Notice, that we're only using 6 beads (bits) per letter. Computers reserve 8 bits per letter, meaning you'd have 2 additional bits to the left of each letter-code, those would be 01.

A isn't (1), it's (65). The last 6 bits are still the same, and they equal 01 when you ignore the 1st 2 bits.



J						
O						
H						
N						
						
S						
M						
I						
T						
H						

Period#: _____

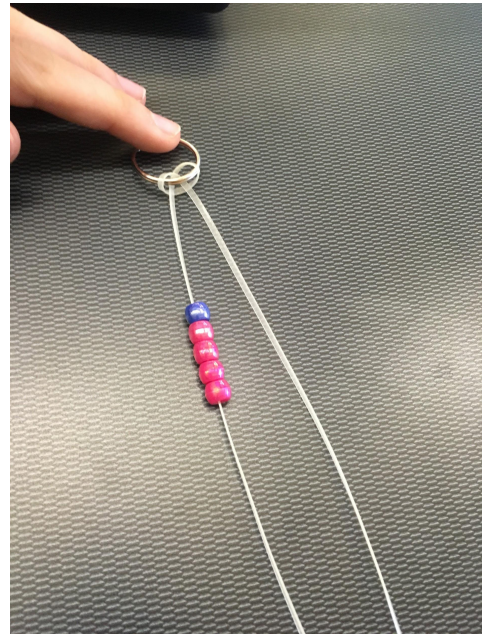
[illegible]

Space (0)	A (1)	B (2)
C (3)	D (4)	E (5)
F (6)	G (7)	H (8)
I (9)	J (10)	K (11)
L (12)	M (13)	N (14)
O (15)	P (16)	Q (17)
R (18)	S (19)	T (20)
U (21)	V (22)	W (23)
X (24)	Y (25)	Z (26)
- (27)	' (28)	Special Symbol (29)

Extra Credit: Actually make the 2D keychain using pony beads, pony lacing, and a keyring or clip.

Keychain Instructions:

1. Collect your supplies
2. Find the center of your lacing
3. From the center of your lacing, tie a [Cow Hitch](#) around the keyring
4. Lay out the beads for the first few rows to save time
5. Thread your first row of beads onto the left string
6. Thread the right string through the beads on the first so that the strings are traveling in opposite directions
7. Pull the strings tight
8. Repeat with the next rows (Emphasis on ensuring that you keep track of the correct side of your keychain)
9. After the last row, tie off the strings
10. Trim extra string



Note: If you use 6 beads, you'll always know which side of the keychain to read from because the leftmost beads will all be the same color. The example above only used 5 beads and it's difficult to tell whether the keychain is backwards or not.