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## How do I automate a key press in AppleScript?

Is it possible to automate the key press of a key (such as "a" or "<") in Mozilla Firefox, Google Chrome or Safari (in this order)? I'd like to automate the key press of "a" for example in Mozilla Firefox for 100 times every  $x$  seconds. With  $x$  being a value between 1 second and 10 seconds chosen randomly at every key press. What Applescript could make the trick?

Also, where can I find a list of all codes for each key of the keyboard?

[lion](#) [mac](#) [applescript](#)

edited Jan 16 '12 at 4:09



[bneely](#)

2,892

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asked Jan 15 '12 at 22:51



[Jeffrey](#)

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### 1 Answer

Run a script like this in AppleScript Editor:

```
activate application "Firefox"
repeat 100 times
    tell application "System Events" to keystroke "a" using command down
    delay (random number from 1 to 10)
end repeat
```

This would simulate pressing ⌘←:

```
tell application "System Events" to key code 123 using {shift down, command down}
```

You can use `key down` and `key up` to simulate clicking a button while holding a modifier key:

```
delay 0.5 -- time to release modifier keys if for example the script is run with command-R
tell application "System Events" to tell process "Notification Center"
    try
        key down option
        delay 0.1
        click menu bar item 1 of menu bar 1
    end try
    key up option
end tell
```

The key codes are defined in

/System/Library/Frameworks/Carbon.framework/Versions/A/Frameworks/HIToolbox.framework/Versions/A/Headers/Events.h . Here is a complete list of the key codes defined in Events.h in an alternative format:


0 A	30 RightBracket	62 RightControl	96 F5
1 S	31 O	63 Function	97 F6
2 D	32 U	64 F17	98 F7
3 F	33 LeftBracket	65 KeypadDecimal	99 F3
4 H	34 I	67 KeypadMultiply	100 F8
5 G	35 P	69 KeypadPlus	101 F9
6 Z	36 Return	71 KeypadClear	102 JIS_Eisu
7 X	37 L	72 VolumeUp	103 F11
8 C	38 J	73 VolumeDown	104 JIS_Kana
9 V	39 Quote	74 Mute	105 F13
10 ISO_Section	40 K	75 KeypadDivide	106 F16
11 B	41 Semicolon	76 KeypadEnter	107 F14
12 Q	42 Backslash	78 KeypadMinus	109 F10
13 W	43 Comma	79 F18	111 F12
14 E	44 Slash	80 F19	113 F15
15 R	45 N	81 KeypadEquals	114 Help
16 Y	46 M	82 Keypad0	115 Home
17 T	47 Period	83 Keypad1	116 PageUp
18 1	48 Tab	84 Keypad2	117 ForwardDelete
19 2	49 Space	85 Keypad3	118 F4
20 3	50 Grave	86 Keypad4	119 End
21 4	51 Delete	87 Keypad5	120 F2
22 6	53 Escape	88 Keypad6	121 PageDown
23 5	55 Command	89 Keypad7	122 F1
24 Equal	56 Shift	90 F20	123 LeftArrow
25 9	57 CapsLock	91 Keypad8	124 RightArrow
26 7	58 Option	92 Keypad9	125 DownArrow
27 Minus	59 Control	93 JIS_Yen	126 UpArrow
28 8	60 RightShift	94 JIS_Underscore	
29 0	61 RightOption	95 JIS_KeypadComma	

You can also use EventViewer (which is included with KeyRemap4MacBook) or [Key Codes](#) to see the key codes of keys.

edited Sep 12 '13 at 17:01

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30.7k 2 32 92

answered Jan 16 '12 at 0:10

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