

Problem statement:

The time is set in a dystopian future when crime is a global issue. Crime Zero Inc. sets up a SMS service where you type in **0 <space> <code>** to call for a super hero for rescue. You are assigned the job of developing a system that reads this code and translates into possible names of super heroes so that Crime Zero Inc. can send a distress signal to alarm your savior.

The program should map the standard telephone keypad numbers to corresponding letters with the given set of super hero names. See APPENDIX for the list of names.

1 @.?	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
* <i>send</i>	0 <i>Zero</i>	# <i>space</i>



E.g.:

4855 generates the following combination of words: [gvlj, htkl, itlj, hulk, gtjj, hvlk, ...]

Out of the 81 combinations, only hulk is a valid name. This is arrived by mapping numbers to letters in the following manner:

4 – h

8 – u

5 – l

5 – k

In Brief:

Write a front-end web page that looks like old mobile phone buttons [like above image] and on press of a button calls a nodejs api.

In nodejs create a program that asks for code and decodes the name of the correct super hero based on the given list of names. And this returned superhero name should be printed on front-end.

Summary:**Program Input**

0 228626

0 4855

0 78737626

0 8467

Program Output

BATMAN

HULK

SUPERMAN

THOR

APPENDIX :

List of super hero names:

SUPERMAN THOR ROBIN IRONMAN GHOSTRIDER CAPTAINAMERICA FLASH
WOLVERINE

BATMAN HULK BLADE PHANTOM SPIDERMAN BLACKWIDOW HELLBOY PUNISHER

Assumptions:

1. All superheros are present all the time and can respond to multiple call.
2. Any of the above superheros can be called for help.

Note: Solution will be judged on creterias:

1. UI/UX
2. Algorithm complexity
3. Microservice architecture
4. Coding practice/guideline.
5. Use of Specific Techonologies mentioned in email.