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Test Name: **MBA: Coding Questions**

Taken On: 2 Aug 2019 10:14:51 PDT

Time Taken: 44 min 55 sec/ 45 min

Work Experience: 1 years

Invited by: Jeff

Invited on: 2 Aug 2019 10:13:24 PDT

Tags Score: Essential 45/70

64.3%

45/70

scored in **MBA: Coding Questions** in 44 min 55 sec on 2 Aug 2019 10:14:51 PDT

Recruiter/Team Comments:

No Comments.

	Question Description	Time Taken	Score	Status
Q1	Exponentiation > Coding	6 min 14 sec	45/ 45	✓
Q2	Phone Number > Coding	38 min 55 sec	0/ 25	✗

QUESTION 1



Correct Answer

Score 45

Exponentiation > Coding

Essential

QUESTION DESCRIPTION

Create a method that raises a number to the given exponent **without** using your language's built-in **pow**, ******, ****=**, etc.

Example:

Input: 2, 5

Output: 32

Exponents *can* be negative.

Example:

Input: 2, -2

Output: 0.25

$(2^{-2} = 1 / 2^2)$

INTERNAL NOTES

45

CANDIDATE ANSWER

Language used: **Ruby**

```
1 # Complete the function below.
2
3 # exp(0, 0) => 0
4 # exp(1, 0) => 1
5 # exp(1, 1) => 1
6 # exp(2, 2) => 4
7 # exp(2, 3) => 8
8 # exp(2, 4) => 16
9 def exponent(base, power)
10   if power < 0
11     return 1 if power >= 0
12     return 1 / base.to_f * exponent(base, power + 1)
13   else
14     return 1 if power <= 0
15     return base * exponent(base, power - 1)
16   end
17
18 end
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Sample Test Case	Easy	Sample case	Success	5	0.1673 sec	12.2 KB
Testcase 1	Medium	Hidden case	Success	20	0.1093 sec	12.2 KB
Testcase 2	Hard	Hidden case	Success	20	0.0972 sec	12.2 KB

No Comments

QUESTION 2



Phone Number > Coding

Essential

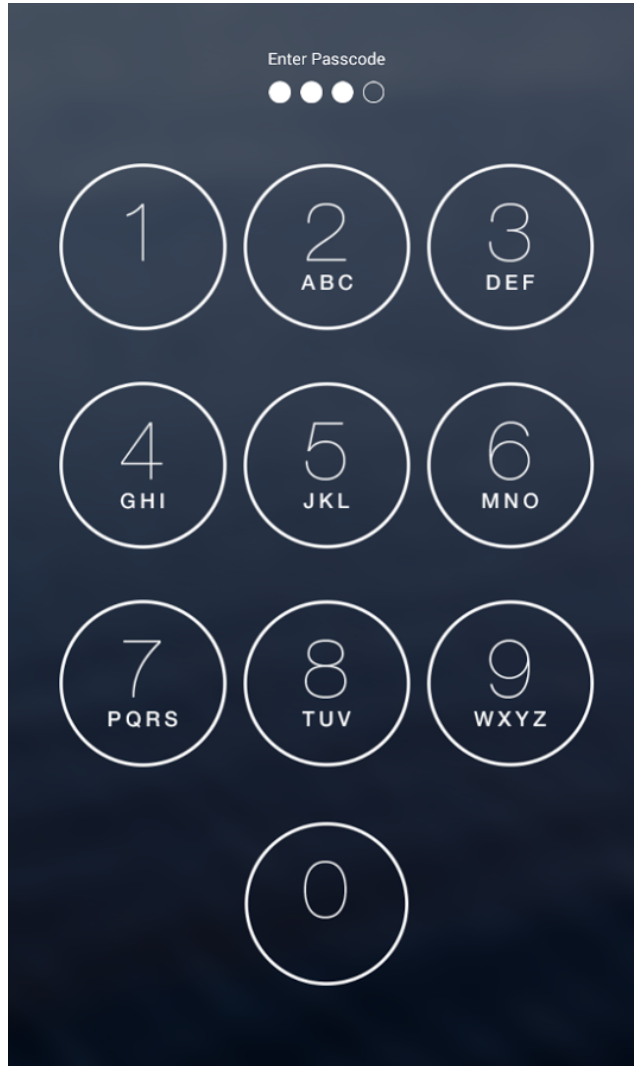
QUESTION DESCRIPTION

While working for a telecom company, part of your job is to sell phone numbers to businesses. Businesses love it when their phone numbers spell words or form catchy acronyms or abbreviation.

Knowing that companies will pay extra for catchy phone numbers, you start trying to make lists of words that can be formed for your phone numbers, but this quickly gets boring, and every time you get a new list of numbers to sell, you have to start the process over again. You decide to automate the hard part.

Given a string containing numeric values, write a program that will return an array of all of the possible letter combinations.

The letters are mapped to numbers as illustrated on the keypad below (**you are welcome to ignore 1 and 0 for this exercise**):



Example:

Input: "45"

Output: ["gj", "gk", "gl", "hj", "hk", "hl", "ij", "ik", "il"]

INTERNAL NOTES



25

CANDIDATE ANSWER

The candidate did not manually submit any code. The last compiled version has been auto-submitted and the score you see below is for the auto-submitted version.

Language used: Ruby

```
1 # Complete the function below.
2
3 def letter_combinations(str)
4   hash = {
5     2 => ['a', 'b', 'c'],
6     3 => ['d', 'e', 'f'],
7     4 => ['g', 'h', 'i'],
8     5 => ['j', 'k', 'l'],
9     6 => ['m', 'n', 'o'],
10    7 => ['p', 'q', 'r', 's'],
11    8 => ['t', 'u', 'v'],
12    9 => ['w', 'x', 'y', 'z']
13  }
14
15  arr = str.split('').map(&:to_i)
16  arr = arr.map { |el| hash[el] }
17  print arr
18 end
19
20
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Sample Test Case	Easy	Sample case	 Runtime Error	0	0.1047 sec	12.1 KB
Testcase 1	Medium	Sample case	 Runtime Error	0	0.1018 sec	12.3 KB

No Comments