**Easy Level Questions**:

1. Write a regex query to extract all the email ids from the below list data set?

List\_data = [‘This is Senthil. My email id is [Senthil.kumar@latentview.com](mailto:Senthil.kumar@latentview.com)’, ‘Hello I am Prakash, my phone number is 993849506’, ‘Please reach me at [gutszen@gmail.com](mailto:gutszen@gmail.com)’]

1. Write a regex query to match a number between:
2. 1000 and 9999
3. 100 and 99999
4. Identify whether a given string

E.g.: Palindrome string: ‘madam’

(Please showcase with 2 test cases – one for the string to palindrome and another for it to be not)

3B) Food for thought: We know what google throws up if you search how to program whether a **number** is palindrome or not. But what if you can reuse the above logic you had used for strings also for palindrome numbers!!!

Bonus question try answering ☺

**Moderate Level Questions**:

1. Given a sentence S, tell us how many times every vowel (a, e , i, o, u) occurs
2. Write a regex query to match dates in all these formats - February 23 or February23 or Feb 23 or Feb23 or Feb23rd or Feb 23rd or February 23rd or February23rd.

**Tough Level Questions**:

1. The following is a dictionary containing a dictionary of Twitter users (e.g.: ‘juesart’ is a Twitter user) and the hashtags they have used with the count of hashtags used

dict1={'juesart': {'#Build2016': 2},

'sibanamush': {'#Build2016': 3, '#Windows10': 1, '#bash': 1},

'doyenne360': {'#AI': 1,

'#App': 1,

'#Azure': 1,

'#Build2016': 12,

'#Developer': 1,

'#Developers': 1,

'#Halolens': 1,

'#Microsoft': 2,

'#Platform': 1,

'#UWP': 1,

'#Windows': 1,

'#Windows10': 1,

'#apps': 1,

'#devs': 1},

'arabwicqatar': {'#Build2016': 1, '#HoloLens': 1},

'kkiyer90': {'#Build2016': 9, '#ManVsAI': 1},

'matteoberlusca': {},

'oleg59popov5': {},

'woody': {},

'bradstone': {'#Build2016': 1},

'ebta': {'#Build2016': 1},

'lechevalierdej': {'#Build2016': 1},

'vincentdondain': {'#Build2016': 3,

'#Microsoft': 1,

'#Xamarin': 1,

'#bestpresenter': 1,

'#microsoftbuild': 1},

'chensong004': {'#build2016': 1},

'stefanolibriani': {'#Azure': 1, '#Build2016': 2, '#IOT': 1},

'dcseifert': {},

'dominucco': {'#Microsoft': 1, '#Xamarin': 1, '#programming': 1},

'urushi\_hatebu': {},

'digitaltrends': {'#Build2016': 3},

'dayala1912': {'#Build2016': 2, '#UWP': 1, '#Xamarin': 1},

'anatoliydq9j25': {},

'kellypranghofer': {'#Build2016': 1},

'curtisornot': {'#Build2016': 1, '#ImagineCup': 1},

'colemickens': {'#Build2016': 2, '#XBoxOne': 1, '#nodejs': 1},

'ktaros2': {'#Azure': 1, '#Build2016': 4, '#IoT': 1, '#Windows10': 1},

'barnyardtech': {'#Build2016': 2, '#windows10': 1},

'bitcrazed': {'#Build2016': 8, '#MonoGame': 1, '#build2016': 3},

'haziq\_ashraf': {'#Build2016': 1},

'rgrunbaum': {},

'technet\_france': {'#Build2016': 3, '#Windows10': 2, '#build2016': 1},

'colasv1': {'#Build2016': 1},

'alexis\_nhk': {'#Awesome': 1, '#Build2016': 3},

'gmile': {'#Build2016': 1},

'jeffjose': {'#Build2016': 3}}

6A. Find out the number of authors who have used only type of hashtag (single or multiple times)?

6B. List out all authors and the hashtags they have used more than 3 times

6C. What is the second most commonly used hashtag and how many times?

6D. List out all authors whose name starts with letter ‘d’

*Btw, the above dictionary is a json file used as input to a HTML file for a d3 network mapping chart !!!*

1. Write a regex query to pull two words before and two words post ‘Xbox’ in the following sentence?

Sentence=”I wont be purchasing an Xbox one as PS4 is always my favourite”