

FAT-LAB-WEB MINING-L41+42, CSE3024

QNO-1. For the following paragraph tokenize it and remove stop words. Prepare a table that includes “Word” and “frequency (2 columns). Print the frequency of all words. How many words are there with starting letter A,S,E? Print the maximum frequency word. Segregate all vowels and print them separately (You can use NLTK tool only)

Paragraph 1:

Delhi is a crowded city. There are very few rich people who travel by their own vehicles. The majority of the people cannot afford to hire a taxi or a three-wheeler. They have to depend on D.T.C. buses, which are the cheapest mode of conveyance. D.T.C. buses are like blood capillaries of our body spreading all over in Delhi. One day I had to go to railway station to receive my uncle. I had to reach there by 9.30 a.m. knowing the irregularity of D.T.C. bus service; I left my home at 7.30 a.m. and reached the bus stop. There was a long queue. Everybody was waiting for the bus but the buses were passing one after another without stopping. I kept waiting for about an hour. I was feeling very restless and I was afraid that I might not be able to reach the station in time. It was 8.45. Luckily a bus stopped just in front of me. It was overcrowded but somehow I managed to get into the bus. Some passengers were hanging on the footboard, so there was no question of getting a seat. It was very uncomfortable. We were feeling suffocated. All of a sudden, an old man declared that his pocket had been picked. He accused the man standing beside him. The young man took a knife out of his pocket and waved it in the air. No body dared to catch him. I thanked God when the bus stopped at the railway station. I reached there just in time.

Paragraph 2:

The proverb has deep meaning, which is always useful for a successful life. It conveys the idea that we should always think and then act accordingly. Impulsive actions may lead us to embarrassing and odd situations. As we should always think before we speak, in the same way we should think before we act. Life is full of various factors, the factors which can fascinate us for the moment but may lead us to failure or the factors which can repel immediately but may be the stepping stones to success. For example, going to a movie or playing video games may seem an attractive thing for the time being but can, in the course of time not only disturb one's studies but also injure our eyes. Therefore, we should always restrain our intuitive and impulsive desires and then act according to what our mind says is right. Even the great men like Gandhi. Nehru, John Kennedy have been prey to their passions and emotions due to which the nations suffered. We should learn from their lives and should always act thoughtfully.

Paragraph 3:

There are many intelligent people in the economic field who would tell us that rising of prices is a phenomenon, which is characteristic of a developing economy. But inflation can be beneficial only if production and national income of the country also increase. But in our country, national income and production do not increase in proportion to the rise in price due to various diverse factors. Since independence, India faced such problems that in spite of major steps taken to improve the economy, our economy has not come up to our expectations. India was attacked by Pakistan and then China in the earlier years of her freedom. It took years to recover from the heavy losses of the war. Then large-scale industries, like Iron and Steel showed losses in earlier stages. This also caused hike in price. Nowadays the main reason behind this unbalanced gallop in price is black money. Government is trying hard to control prices by coming down heavily on corrupt officers. It's taking proper steps to control

prices which are causing economic hardships in a commoner's life. But all these measures will take time to show results. At present the rising of prices is a painful reality which cannot be avoided in our day to day life.

Paragraph 4:

A few days ago I went to see an interesting football match played between the D.A.V. Higher Secondary School, Karnal and the Govt. Higher Secondary School, Shahabad on the grounds of the S.D. Higher Secondary School, Karnal. A large crowd of students and men from the town were present to cheer up the players. The match began at 4.30 p.m. About five minutes before the fixed time, the referee called upon the captains of the two teams to toss for sides. The D.A.V.'s won the toss. Soon after, the referee blew the whistle and the players took their positions. At another loud whistle, the center forward of the local school picked the ball and the play began. From the very start, the Govt. School team took the offensive. Twice they tried hard to make the ball pass through the goal post, but the goalkeeper of the opposing team warded it off each time. However, he could not resist the attack for long and the Govt. School center forward shot the ball through the goal by chance. They were loudly cheered by the spectators. Soon after the half time, the game was resumed. The D.A.V.'s got many chances but failed to score a goal. When only five minutes were left they made their great dash. In spite of strong opposition, their Forwards carried the ball with full force and a goal was scored. There was a hail of shouts and the students of D.A.V. flung their caps high up in the air. The match ended in a draw.

Paragraph 5:

The school fair is right around the corner, and tickets have just gone on sale. We are selling a limited number of tickets at a discount, so move fast and get yours while they are still available. This is going to be an event you will not want to miss! First off, the school fair is a great value when compared with other forms of entertainment. Also, your ticket purchase will help our school, and when you help the school, it helps the entire community. But that's not all! Every ticket you purchase enters you in a drawing to win fabulous prizes. And don't forget, you will have mountains of fun because there are acres and acres of great rides, fun games, and entertaining attractions! Spend time with your family and friends at our school fair. Buy your tickets now!

Paragraph 6:

The school fair is right around the corner, and tickets have just gone on sale. Even though you may be busy, you will still want to reserve just one day out of an entire year to relax and have fun with us. Even if you don't have much money, you don't have to worry. The school fair is a community event, and therefore prices are kept low. Perhaps, you are still not convinced. Maybe you feel you are too old for fairs, or you just don't like them. Well, that's what my grandfather thought, but he came to last year's school fair and had this to say about it: "I had the best time of my life!" While it's true you may be able to think of a reason not to come, I'm also sure you can think of several reasons why you must come. We look forward to seeing you at the school fair!

Paragraph 7:

Last week we installed a kitty door so that our cat could come and go as she pleases. Unfortunately, we ran into a problem. Our cat was afraid to use the kitty door. We tried pushing her through, and that caused her to be even more afraid. The kitty door was dark, and she couldn't see what was on the other side. The first step we took in solving this problem was taping the kitty door open. After a couple of days, she was confidently coming and going through the open door. However, when we removed the tape and closed the door, once again, she would not go through. They say you catch more bees with honey, so we decided to use food as bait. We would sit next to the kitty door with a can of wet food and click the top of the can. When kitty came through the closed door, we would open the can and feed her. It took five days of doing this to make her unafraid of using the kitty door. Now we have just one last problem; our kitty controls our lives!

Para 8

We believe that we can change the things around us in accordance with our desires—we believe it because otherwise we can see no favourable outcome. We do not think of the outcome which generally comes to pass and is also favourable: we do not succeed in changing things in accordance with our desires, but gradually our desires change. The situation that we hoped to change because it was intolerable becomes unimportant to us. We have failed to surmount the obstacle, as we were absolutely determined to do, but life has taken us round it, led us beyond it, and then if we turn round to gaze into the distance of the past, we can barely see it, so imperceptible has it become.

Para 9:

Sometimes fate is like a small sandstorm that keeps changing directions. You change direction but the sandstorm chases you. You turn again, but the storm adjusts. Over and over you play this out, like some ominous dance with death just before dawn. Why? Because this storm isn't something that blew in from far away, something that has nothing to do with you. This storm is you. Something inside of you. So all you can do is give in to it, step right inside the storm, closing your eyes and plugging up your ears so the sand doesn't get in, and walk through it, step by step. There's no sun there, no moon, no direction, no sense of time. Just fine white sand swirling up into the sky like pulverized bones. That's the kind of sandstorm you need to imagine

Para 10 or 0 :

Life is beautiful, but not always. It has lots of problems you have to face every day. Don't worry though! All these problems make you strong, it gives you courage to stand alone in future. Life is full of moments of joy, pleasure, success and comfort punctuated by misery, defeat, failures and problems. There is no human being on Earth, strong, powerful, wise or rich, who has not experienced, struggle, suffering or failure. You have to work hard to reach to the highest position. Life is full of paths, you just have to choose the right one. Life is interesting and amazing like the stars up in the skies. With no doubt, Life is beautiful and full of celebrations. However you should always be ready to face adversity and challenges. There are difficult situations in life as well. Be careful!! You might get hurt too hard. Life is sometimes too selfish to think about yourself. Then life is too hard to handle. Falling in love! People tend to fall in love nowadays but i personally think the right time has to come... You might also get hurt in Love. You might be broken-hearted as the people say.

QNO-2 :

Using Naïve Bayes classification method classify the following data

[https://archive.ics.uci.edu/ml/datasets/Spambase.](https://archive.ics.uci.edu/ml/datasets/Spambase)

Find AUC, Confusion Matrix and precision recall

QNO-3

Using Naïve Bayes classification method classify the following data

<https://archive.ics.uci.edu/ml/machine-learning-databases/wine/>

Find accuracy.

QNO-4

Implement naïve Bayes for following text classification

<u>text</u>	<u>Tag</u>	
Web Mining is a good subject	Subject	
Prof AB is hard working teacher	Teacher	
OS is a grate subject	Subject	
Prof OP is busy always busy with academic research	Teacher	
Bing Liu book of web mining is worth to read	subject	

Now, which tag does the sentence ***Web Mining is a grate subject*** belong to?

QNO-5

Apply K means clustering methods for the following data (may be purchase column)

<https://www.kaggle.com/arjunbhasin2013/ccdata>