ASSIGNMENT 1

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Q6 PART 1

- 1. First word starts with a letter 'Z' or 'z', followed by zero or more letters between 'a' and 'z' and ends with a letter 'a'.
- a) Write down the regular expression to extract first word.

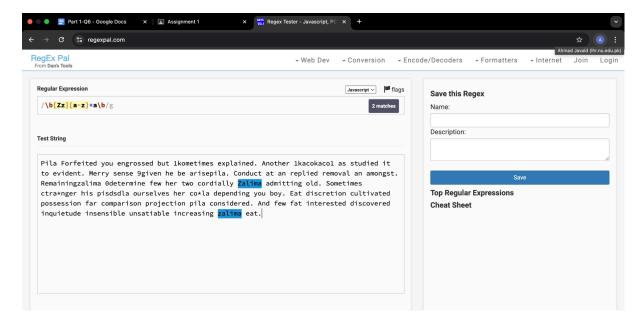
$$b[Zz][a-z]*ab$$

b) What is the frequency (count) of first word in random text?

2

c) What's the first word?

Zalima

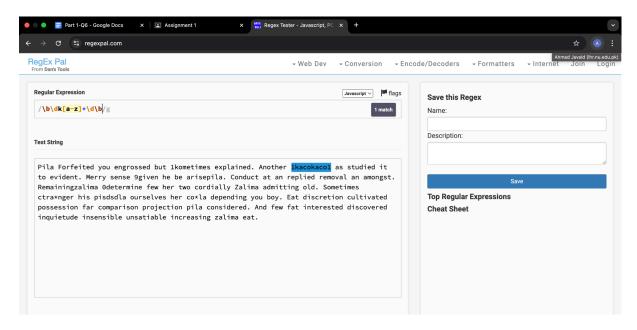


- **2.** Second word starts with a digit, followed by a letter 'k', followed by zero or more letters between 'a' and 'z' and ends with a digit.
- a) Write down the regular expression to extract the second word.

$$\b\langle dk[a-z]* \rangle db$$

- b) Write down the word you extracted using above regular expression.

 1kacokaco1
- c) Remove first and last three letters/ digits from word you get in part b to get actual second word. What's the second word? coka



- **3.** Third word starts with a letter 'c', followed by zero or more letters between 'a' and 'z', followed by a star '*', followed by one or more letters between 'a' and 'z' and ends with a letter 'a'.
- a) Write down the regular expression to extract the third word.

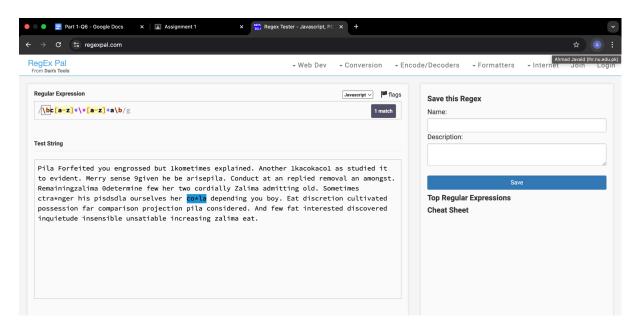
$$\bc[a-z]**[a-z]+a\b]$$

co*la

b) Write down the word you extracted using above regular expression.

c) Remove star '*' from word you get in part b) to get actual third word. What's the third word?

cola



- **4.** Fourth word starts with a letter 'P' or 'p', followed by exactly two letters between 'a' and 'z' and ends with a letter 'a'.
- a) Write down the regular expression to extract the fourth word.

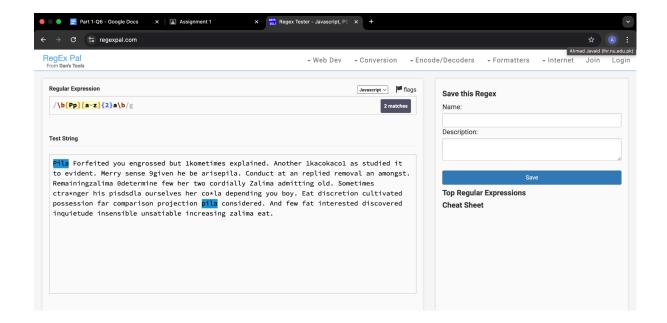
$$b[Pp][a-z]{2}ab$$

b) What is the frequency (count) of fourth word in random text?

2

c) What's the fourth word?

Pila



5. Well, if you have correctly extracted first four words, you can easily predict the fifth word. Write down the complete five word message that your shy friend sent you.

Fifth word: de

Decrypted: Zalima coka cola pila de