

Assignment

Question-1

Write a program to maintain text justification problem.

Sample Input

```
words = ["This", "is", "a", "text", "justification", "problem", "in", "tutorial", "horizon"]
```

```
length = 20;
```

Output:

```
This is a text
justification
problem in tutorial
horizon
```

Maintain an index which tracks the numbers of words already justified

- (1) Say Length = L number of characters in each line.
- (2) Start taking words into a new line.
- (3) Keep track of number of characters adding to the new line.
- (4) Add a special character ('@') after each word (later will replace by space ' ')
- (5) Stop adding word to new line if Either adding new word will exceed the characters count in line from given length L Or characters count = Length L.
- (6) Calculate the number of spaces needs to add to make the characters count to length L.
- (7) Evenly distribute the spaces between the selected words. If any spaces are left (in case even distribution is not possible), add it to between first 2 words.
- (8) Replace '@' with spaces calculated in the step above.
- (9) Make a recursive call for rest of the words (from step 2 to Step 8)
- (10) See the code for better understanding.