Explain to me below line code :

String str = new String(s2, k, wordLength); // [ k, k+wordLength )

Integer key = hash.get(str);

The code creates a new string **str** from a substring of another string **s2**. The substring starts at index **k** and has a length of **wordLength**. So the substring is made up of characters from **s2** at indices **k** through **k + wordLength - 1**.

Then, it checks for the key value of **str** in the HashMap **hash**, if the key is present it will give the corresponding value, if not it will return null.

What do you mean by corresponding value ?

In this context, "corresponding value" refers to the value that is associated with a particular key in a **HashMap**. A **HashMap** is a type of data structure in Java that stores key-value pairs. When you call the **hash.get(str)** method, the **HashMap** looks for the key **str** and returns the value that is associated with that key.

If the key is present in the HashMap, it returns the value associated with the key, otherwise it returns **null**.

Here's a simple example:

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HashMap<String, Integer> map = new HashMap<>(); map.put("one", 1); map.put("two", 2); Integer value = map.get("one"); //value will be 1 as "one" is present as key in map and its value is 1.

so in above example key "one" have value 1, and map.get("one") will return the value 1. In the code you provided **str** is key of HashMap **hash**, it is trying to get the value which is associated with key **str**.

So, if count[key] is less than localCount[key], will localCount[key] also be increased?

No, if **count[key] < localCount[key]** the if block inside the code you provided will not be executed, so the localCount will not be increased.

**localCount[key]** is only increased if **key != null && count[key] >= ++localCount[key]** this condition is false, that means when the count of the current word from the **count** array is greater than the count of the current word from the **localCount** array, in that case only localCount[key] will be incremented by 1 before making the comparison with count[key]

Otherwise, if the count of the current word from the **count** array is not greater than the count of the current word from the **localCount** array, it means the if block inside the code will not execute and thus localCount[key] will not be incremented.