211. Add and Search Word - Data structure design

Medium 1487 77 Add to List Share

Design a data structure that supports the following two operations:

```
void addWord(word)
bool search(word)
```

search(word) can search a literal word or a regular expression string containing only letters `a-z` or `.`. A `.` means it can represent any one letter.

```
addWord("bad")
addWord("dad")
addWord("mad")
search("pad") -> false
search("bad") -> true
search(".ad") -> true
search("b..") -> true
```

> implement Basic trie just modify search algo.
> agar ch == '.' hai to sabhi non-NULL se call lagado. agar kahi se true answer mila to answer agyega.

```
bool search_(Node *node, int si, string &word)
{
    if (node == nullptr)
        return false;
    if (si == word.length())
        return node->wordEnd != 0;

    bool res = false;
    if (word[si] == '.')
    {
        for (int i = 0; i < 26 && !res; i++)
        {
            if (node->childs[i] != nullptr)
                res = res || search_(node->childs[i], si + 1, word);
        }
    }
    else
        res = res || search_(node->childs[word[si] - 'a'], si + 1, word);

    return res;
}

bool search(string word)
{
    return search_(root,0,word);
}
```