

```
class Solution {
public:
    string removeOccurrences(string s, string part) {
```

- This defines a class Solution with a public method removeOccurrences.
 - The method takes two strings:
 - s — the main string from which you want to remove all occurrences of part.
 - part — the substring that you want to remove repeatedly from s.
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```
while(s.length() != 0 && s.find(part) < s.length()){
```

This is the **while loop condition**. It keeps running as long as:

1. s.length() != 0: the string s is **not empty**.
 2. s.find(part) < s.length(): the substring part **exists somewhere inside s**.
- How does s.find(part) work?
 - It returns the **starting index of the first occurrence** of part in s.
 - If part is not found, it returns a special value called string::npos, which is a **very large number** (usually larger than any possible string length).
 - So, checking s.find(part) < s.length() means: “**If the substring part is found somewhere inside s, then continue the loop.**”
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```
s.erase(s.find(part), part.length());
```

Inside the loop, this line does the actual removal:

- s.find(part) returns the starting index of the **first occurrence** of part.
 - part.length() gives the number of characters in the substring part.
 - s.erase(position, length) removes length characters from s, starting at position.
- So this removes **the first occurrence** of part from s.
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```
}
```

```
return s;
```

- After the loop finishes (meaning there are no more occurrences of part in s), the function returns the modified string s.
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Summary of what your code does:

- It keeps looking for the **first occurrence** of the substring part inside s.
 - Removes it immediately when found.
 - Keeps repeating this process until part no longer exists in s.
 - Then returns the final string with all occurrences of part removed.
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Important note:

Your code works fine, but calling `s.find(part)` **twice per loop iteration** (once in the condition and once in `erase`) is inefficient. You can store the result of `s.find(part)` in a variable to avoid doing the same search twice. Also, checking for `s.length() != 0` is not necessary because if s is empty, `find()` will return `npos` anyway.
