Searching Strings Exercises

Searching a string

- Write a program which creates a string with the characters "Hello world"

- Find the following characters or substrings in the string and display suitable output. Make sure you handle the case where the search is unsuccessful
  - 'o'
  - "or"
  - 'O'

Searching a string

- Explain your results

find()

- Explain what the code does and how it works
- Convert it into a working program which prints out str
- What results do you expect?

```
string str {"Hello world"};
size_t pos = str.find('o');

if (pos != string::npos) {
    str[pos] = 'p';
}
else {
    cout << "Could not find the search string\n";
}
```

rfind()

- Explain what the std::string member function rfind() does

- Repeat the previous exercise but using rfind() instead of find(). What result do you expect?

More Search Functions

- Explain what the code below does

- Convert it into a working program

- What output do you expect?

```cpp
string vowels {"aeiou"};
cout << str.find_first_of(vowels) << endl;
cout << str.find_last_of(vowels) << endl;
cout << str.find_first_not_of(vowels) << endl;
cout << str.find_last_not_of(vowels) << endl;
```