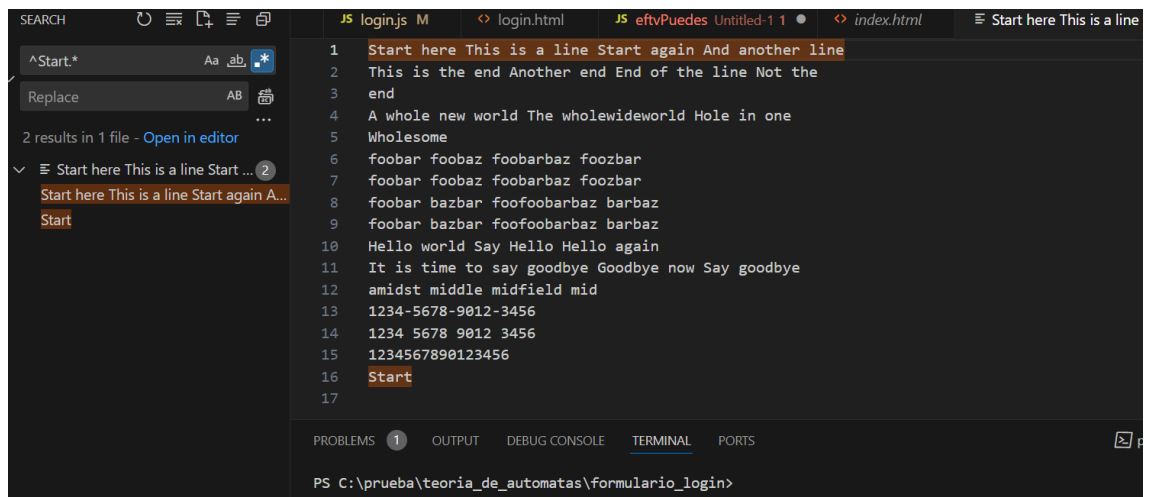


EJERCICIOS

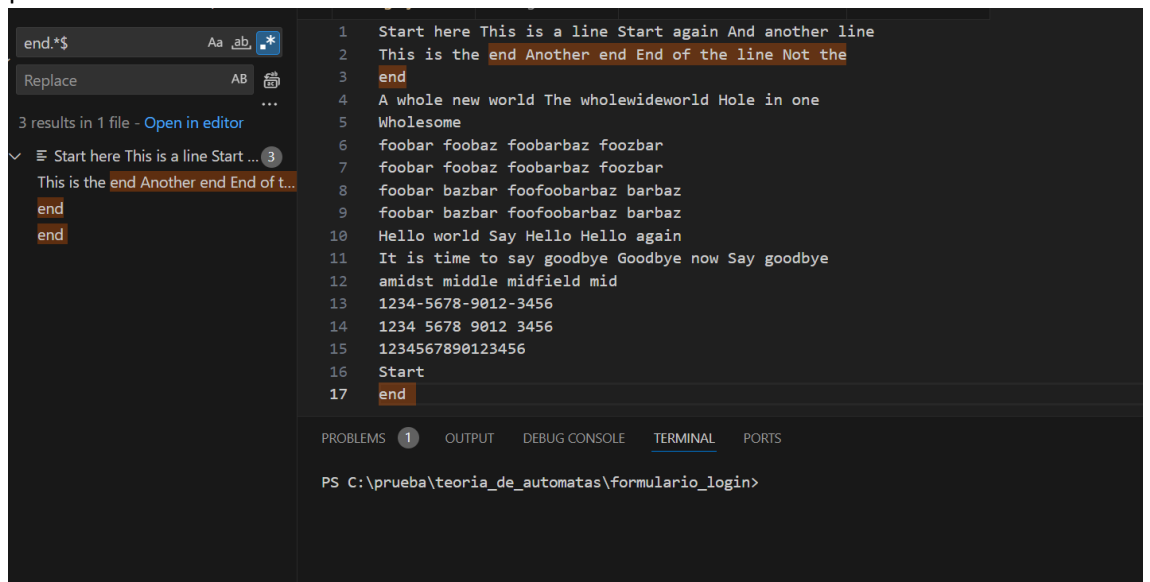
1. Desarrollar una expresión regular para encontrar todas las líneas que comienzan con la palabra "Start".



```
SEARCH ^Start.* 2 results in 1 file - Open in editor
Replace AB ...

1 Start here This is a line Start again And another line
2 This is the end Another end End of the line Not the
3 end
4 A whole new world The wholewideworld Hole in one
5 Wholesome
6 foobar foobaz foobarbaz foozbar
7 foobar foobaz foobarbaz foozbar
8 foobar bazbar foofoobarbaz barbaz
9 foobar bazbar foofoobarbaz barbaz
10 Hello world Say Hello Hello again
11 It is time to say goodbye Goodbye now Say goodbye
12 amidst middle midfield mid
13 1234-5678-9012-3456
14 1234 5678 9012 3456
15 1234567890123456
16 Start
17
```

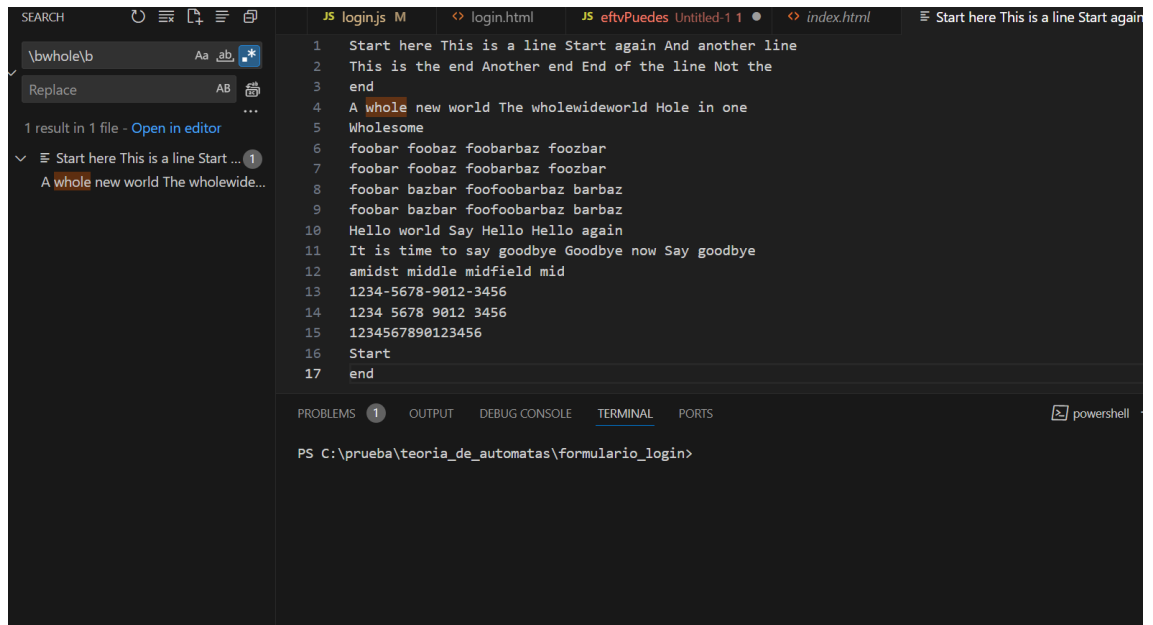
2. Realizar una expresión regular para encontrar todas las líneas que terminan con la palabra "end".



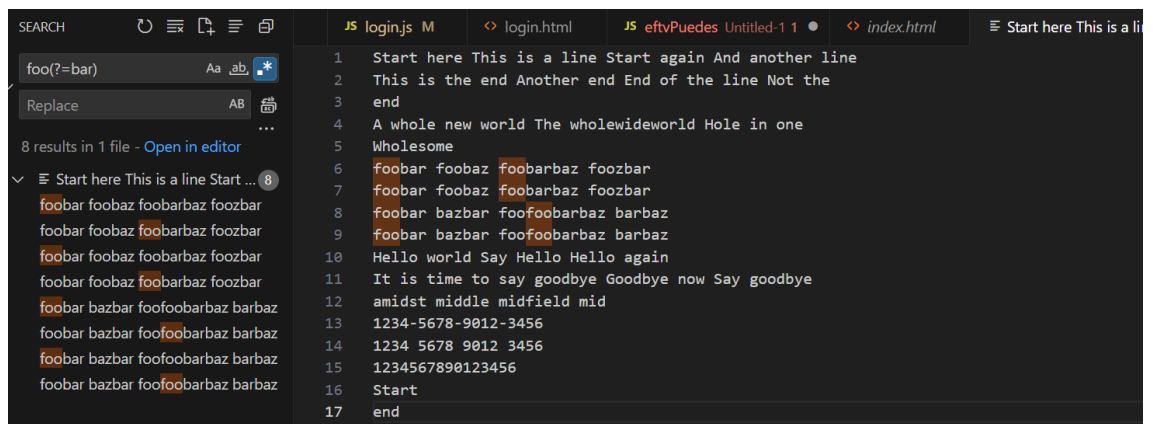
```
end.*$ 3 results in 1 file - Open in editor
Replace AB ...

1 Start here This is a line Start again And another line
2 This is the end Another end End of the line Not the
3 end
4 A whole new world The wholewideworld Hole in one
5 Wholesome
6 foobar foobaz foobarbaz foozbar
7 foobar foobaz foobarbaz foozbar
8 foobar bazbar foofoobarbaz barbaz
9 foobar bazbar foofoobarbaz barbaz
10 Hello world Say Hello Hello again
11 It is time to say goodbye Goodbye now Say goodbye
12 amidst middle midfield mid
13 1234-5678-9012-3456
14 1234 5678 9012 3456
15 1234567890123456
16 Start
17 end
```

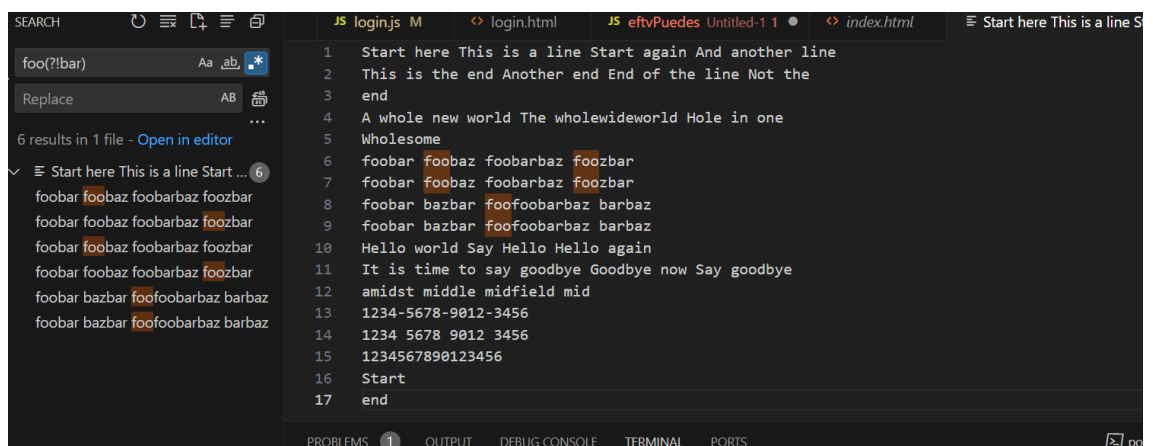
3. Realizar una expresión regular para encontrar la palabra " whole" solo cuando es una palabra completa.



4. Realizar una expresión regular para encontrar la palabra "foo" solo si es seguida por "bar".



5. Realizar una expresión regular para encontrar la palabra "foo" solo si no es seguida por "bar".



6. Realizar una expresión regular para encontrar la palabra "bar" solo si es precedida por "foo"

The screenshot shows the VS Code interface with a search bar containing the regex `(?<=foo)bar`. The search results list 8 matches in the file `formulario_login`. The matches are:

- foobar
- foobar
- foobar
- foobar
- foobar
- foobar
- foobar
- foobar

The main editor shows the following text:

```
1 Start here This is a line Start again And another line
2 This is the end Another end End of the line Not the
3 end
4 A whole new world The wholewideworld Hole in one
5 Wholesome
6 foobar foobaz foobarbaz foobar
7 foobar foobaz foobarbaz foobar
8 foobar bazbar foofoobarbaz barbaz
9 foobar bazbar foofoobarbaz barbaz
10 Hello world Say Hello Hello again
11 It is time to say goodbye Goodbye now Say goodbye
12 amidst middle midfield mid
13 1234-5678-9012-3456
14 1234 5678 9012 3456
15 1234567890123456
16 Start
17 end
```

7. Realizar una expresión regular para encontrar la palabra "bar" solo si no es precedida por "foo".

The screenshot shows the VS Code interface with a search bar containing the regex `(?!foo)bar`. The search results list 6 matches in the file `formulario_login`. The matches are:

- bar
- bar
- bar
- bar
- bar
- bar

The main editor shows the same text as in the previous screenshot. The terminal at the bottom shows the command prompt `PS C:\prueba\teoria_de_automatas\formulario_login>`.

8. Realizar una expresión regular para encontrar la palabra "Hello" solo si está al inicio del texto completo.

The screenshot shows the VS Code interface with a search bar containing the regex `^(?=\b(w+\.s)\b)Hello\b`. The search results list 1 match in the file `formulario_login`. The match is:

- Hello

The main editor shows the following text:

```
1 Start here This is a line Start again And another line
2 This is the end Another end End of the line Not the
3 end
4 A whole new world The wholewideworld Hole in one
5 Wholesome
6 foobar foobaz foobarbaz foobar
7 foobar foobaz foobarbaz foobar
8 foobar bazbar foofoobarbaz barbaz
9 foobar bazbar foofoobarbaz barbaz
10 Hello world Say Hello Hello again
11 It is time to say goodbye Goodbye now Say goodbye
12 amidst middle midfield mid
13 1234-5678-9012-3456
14 1234 5678 9012 3456
15 1234567890123456goodbye
16 Start
17 end
```

The terminal at the bottom shows the command prompt `PS C:\prueba\teoria_de_automatas\formulario_login>`.

9. Realizar una expresión regular para encontrar la palabra "goodbye" solo si está al final del texto completo.

The screenshot shows the Visual Studio Code interface with a search for the regular expression `goodbye$`. The search results pane on the left indicates "2 results in 1 file" and lists two matches: "Start here This is a line Start ... 2" and "...say goodbye Goodbye now Say goodbye 1234567890123456goodbye". The main editor displays a text file with 17 lines of code. The word "goodbye" is highlighted in orange on line 11 ("It is time to say goodbye Goodbye now Say goodbye") and line 15 ("1234567890123456goodbye"). The bottom status bar shows the terminal with the command prompt "PS C:\prueba\teoria_de_automatas\formulario_login>".

10. Realizar una expresión regular para encontrar la secuencia "mid" solo si no está en un borde de palabra.

The screenshot shows the Visual Studio Code interface with a search for the regular expression `(?!\\b)mid(?!\\b)`. The search results pane on the left indicates "1 result in 1 file" and lists one match: "amidst middle midfield mid". The main editor displays the same text file as in the previous screenshot. The word "amidst" is highlighted in orange on line 12, indicating the match for the "mid" sequence not at a word boundary. The bottom status bar shows the terminal with the command prompt "PS C:\prueba\teoria_de_automatas\formulario_login>".

EJERCICIOS EXTRA

1. Realizar una expresión regular para validar números de tarjeta de crédito que cumplan con las siguientes condiciones:
 - Los números deben estar agrupados en bloques de 4 dígitos.
 - Cada bloque debe estar separado por un espacio o un guión.
 - Debe haber un total de 4 bloques (16 dígitos en total).

The screenshot shows a VS Code editor with a search bar at the top containing the regex `^(?!\d{4})(-|\s){3}\d{4}$`. The search results pane on the left shows two matches in a file named `Start here This is a line Start ...`: `1234-5678-9012-3456` and `1234 5678 9012 3456`. The main editor shows a list of lines with the same matches highlighted. The terminal at the bottom shows the command prompt `PS C:\prueba\teoria_de_automas\formulario_login>`.

2. Realizar una expresión regular para encontrar y extraer texto que esté entre comillas dobles, pero que no esté precedido por una barra invertida (\).

The screenshot shows a regex testing tool interface. The 'Expression' field contains the regex `/(?<!\\"")(^[^"]*)" /g`. The 'Text' tab is selected, showing a sample text with various quoted strings. The 'Tests' tab is also visible, showing the results of the regex matches.

3. Realizar una expresión regular para encontrar fechas en formato DD/MM/YYYY donde el día esté entre 01 y 31, el mes entre 01 y 12 y el año entre 1900 y 2099.

