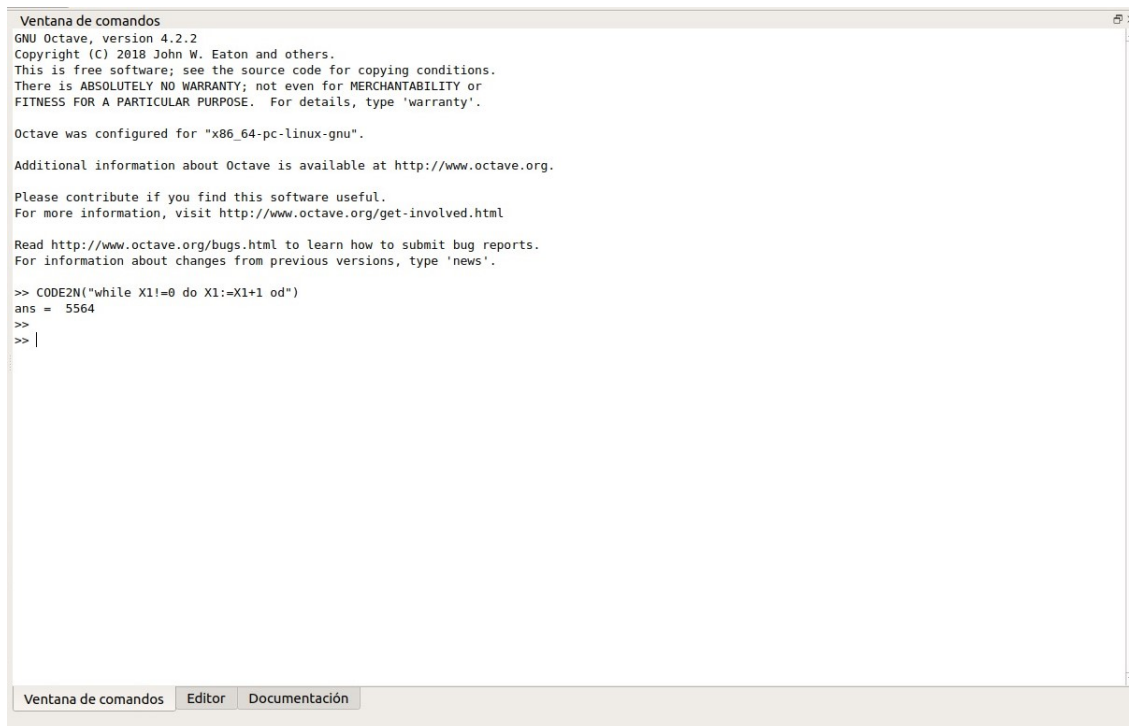


# Práctica 4

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## 1. Código WHILE

Create the simplest WHILE program that computes the diverge function (with zero arguments) and compute the codification of its code.



```
Ventana de comandos
GNU Octave, version 4.2.2
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FITNESS FOR A PARTICULAR PURPOSE. For details, type 'warranty'.

Octave was configured for "x86_64-pc-linux-gnu".

Additional information about Octave is available at http://www.octave.org.

Please contribute if you find this software useful.
For more information, visit http://www.octave.org/get-involved.html

Read http://www.octave.org/bugs.html to learn how to submit bug reports.
For information about changes from previous versions, type 'news'.

>> CODE2N("while X1!=0 do X1:=X1+1 od")
ans = 5564
>>
>> |
```

Ventana de comandos Editor Documentación

## 2. Vectores

Create an Octave script that enumerates all the vectors.

```
function vectores()
    while true
        disp( godeldecoding(i))
    end
end
```

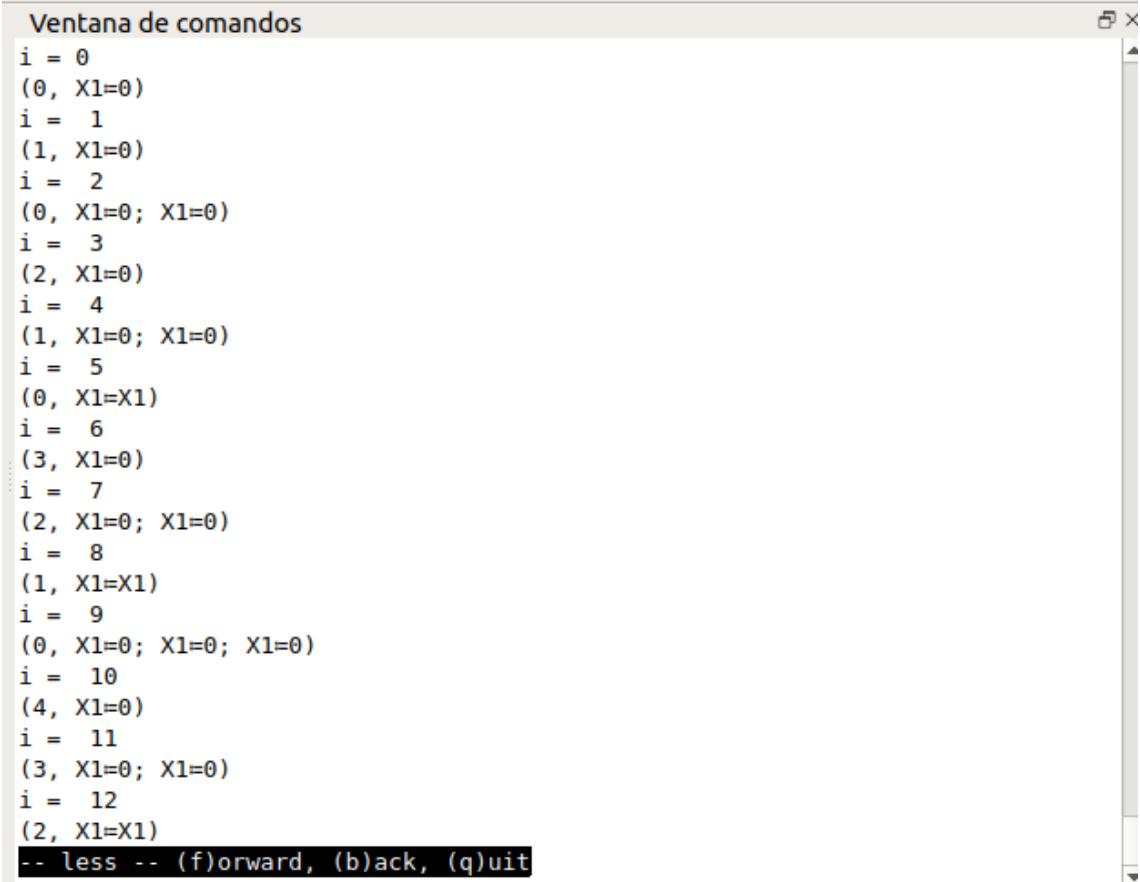


```
>> vectores()
i = 0
[] (0x0)
i = 1
0
i = 2
0 0
i = 3
1
i = 4
0 0 0
i = 5
1 0
i = 6
2
i = 7
0 0 0 0
i = 8
1 0 0
i = 9
0 1
i = 10
3
i = 11
0 0 0 0 0
i = 12
```

### 3. Todos los códigos WHILE

Create an Octave script that enumerates all the WHILE programs.

```
function whilecode()
  i = 0
  while true
    disp(N2WHILE(i))
    i = i+1
  end
end
```



```
Ventana de comandos
i = 0
(0, X1=0)
i = 1
(1, X1=0)
i = 2
(0, X1=0; X1=0)
i = 3
(2, X1=0)
i = 4
(1, X1=0; X1=0)
i = 5
(0, X1=X1)
i = 6
(3, X1=0)
i = 7
(2, X1=0; X1=0)
i = 8
(1, X1=X1)
i = 9
(0, X1=0; X1=0; X1=0)
i = 10
(4, X1=0)
i = 11
(3, X1=0; X1=0)
i = 12
(2, X1=X1)
-- less -- (f)orward, (b)ack, (q)uit
```