Práctica 4

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Activities

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

$Q = (0, s)$

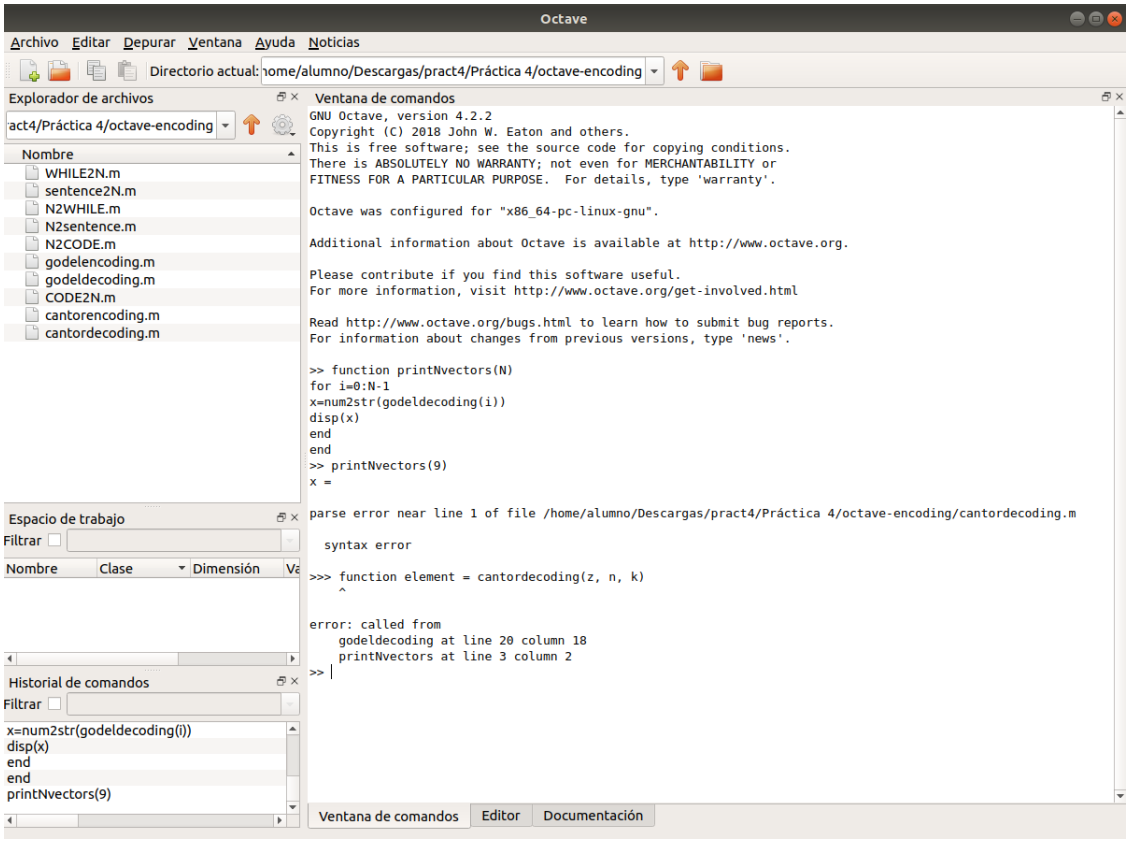
s:

$X_2 := X_1 + 1;$
while $G(X_2) \neq 0$ **do**
$X_1 := 0;$
od

```
>> CODE2N("X2:=X1+1; while X2!=0 do X1:=0 od")
ans =  10876
```

2.Create an Octave script that enumerates all the vectors.

```
function printNvectors(N)
for i=0:N-1
disp(['(' num2str(godeldecoding(i)) ')'])
end
end
```



3.Create an Octave script that enumerates all the WHILE programs.

```
function printNwhilePrograms(N)
for i=0:N-1
disp(N2WHILE(i))
end
end
```

```
>> function printNwhilePrograms(N)
for i=0:N-1
x=N2WHILE(i)
disp(x)
end
end
>> printNWhilePrograms(19)
error: 'printNWhilePrograms' undefined near line 1 column 1
>> N2WHILE(150)
parse error near line 1 of file /home/alumno/Descargas/pract4/Práctica 4/octave-encoding/cantordecoding.m

  syntax error

>>> function element = cantordecoding(z, n, k)
    ^

error: called from
    N2WHILE at line 12 column 8
>>
```