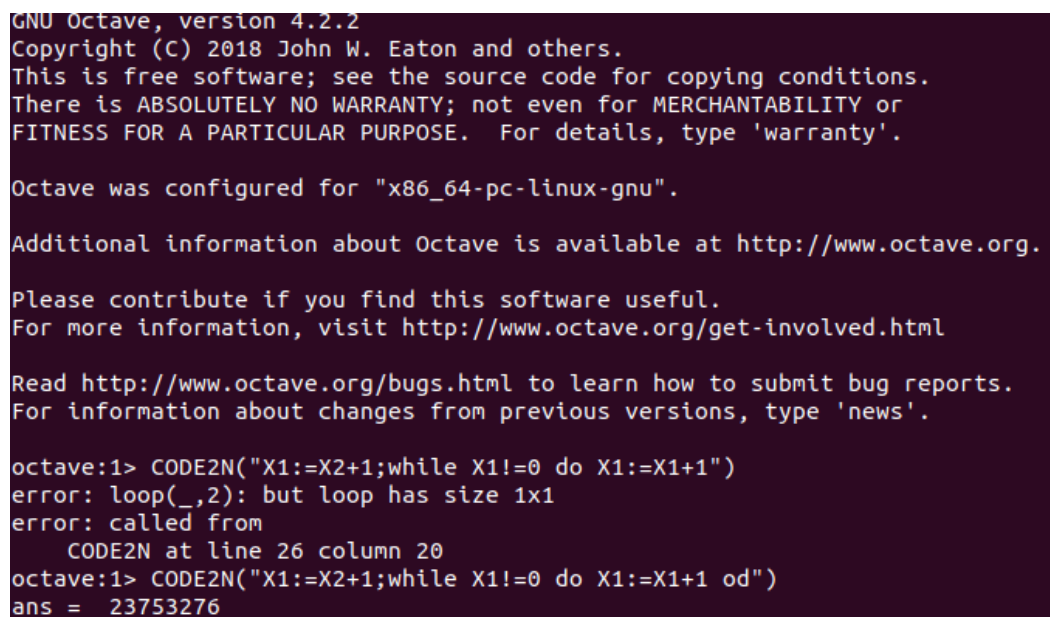# Practica 4

25 de diciembre de 2022

1)

```
s:
X1:= X2+1
while X1!=0 do
      X1:=X1+1
od
```

```
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'.

octave:1> CODE2N("X1:=X2+1;while X1!=0 do X1:=X1+1")
error: loop(_,2): but loop has size 1x1
error: called from
    CODE2N at line 26 column 20
octave:1> CODE2N("X1:=X2+1;while X1!=0 do X1:=X1+1 od")
ans =  23753276
```

2)

```
function printVect(N)
  i=0;
```

1

```octave
  while (i<N)
    disp([' (' num2str(godeldecoding(i)) ')'])
    i = i + 1;
  endwhile
end
```

```
octave:1> printVect(22)
 ()
 (0)
 (0  0)
 (1)
 (0  0  0)
 (1  0)
 (2)
 (0  0  0  0)
 (1  0  0)
 (0  1)
 (3)
 (0  0  0  0  0)
 (1  0  0  0)
 (0  0  1)
 (2  0)
 (4)
 (0  0  0  0  0  0)
 (1  0  0  0  0)
 (0  0  0  1)
 (0  1  0)
 (1  1)
 (5)
octave:2>
```

3)

```octave
function printWhile(N)
  i=0;
  while (i<N)
    disp(N2WHILE(i))
    i = i + 1;
  endwhile
end
```

```
octave:2> printWhile(14)
(0, X1:=0)
(1, X1:=0)
(0, X1:=0; X1:=0)
(2, X1:=0)
(1, X1:=0; X1:=0)
(0, X1:=X1)
(3, X1:=0)
(2, X1:=0; X1:=0)
(1, X1:=X1)
(0, X1:=0; X1:=0; X1:=0)
(4, X1:=0)
(3, X1:=0; X1:=0)
(2, X1:=X1)
(1, X1:=0; X1:=0; X1:=0)
octave:3>
```