

Práctica4

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1 Simplest WHILE

$Q = (0, s)$

s:

```
 $X_1 := X_1 + 1;$   
  while  $x_1 \neq 0$  do  
     $X_1 := X_1 + 1;$   
  od
```

Su codificación es 1668975

```
CODE2N at line 38 column 18  
>> CODE2N("X1:=X1+1;while X1!=0 do X1:=X1+1 od")  
ans = 16689751
```

2 Godelización N

```
>> function printNvectors(N)  
for i=0:N-1  
disp(['(' num2str(godeldecoding(i) ' ')] )  
end  
end;  
>> printNvectors(6)  
(  
(0  
(00  
(1  
(000  
(10  
>>
```

3 Programas while

```
>> function printNwhilePrograms(N)
for i=0:N-1
    disp(N2WHILE(i))
end
end;
>> printNwhilePrograms(5)
(0, X1=0)
(1, X1=0)
(0, X1=0; X1=0)
(2, X1=0)
(1, X1=0; X1=0)
>>
```