

CFG5 ASIX

MP06 • UF02 • NF01

EXERCICIS DE REPETICIONS

01. Entra pel teclat un valor numèric enter (n, que serà més gran que 1) i mostrar per pantalla el seu número de la successió de *Fibonacci*.

```
' Fibonacci  
' cscript //nologo exercici-01.vbs
```

```
Option Explicit
```

```
Dim Num, I, Primer, Segon, Suma
```

```
WScript.StdOut.Write "Numero: "  
Num=Wscript.StdIn.ReadLine
```

```
If (Num>0) Then  
    If (Num<2) Then  
        WScript.StdOut.Write "f(1)=1"  
    Else  
        Primer=0  
        Segon=1  
        For I=2 To Num  
            Suma=Primer+Segon  
            Primer=Segon  
            Segon=Suma  
        Next  
  
        WScript.StdOut.Write "f(" & Num & ")= " & Suma  
    End If  
Else  
    WScript.StdOut.Write "f(0)=0"  
End IF  
  
WScript.Quit
```

cmd C:\Windows\system32\cmd.exe

C:\scripts>cscript //nologo exercici-01.vbs

Numero: 0

f(0)=0

C:\scripts>cscript //nologo exercici-01.vbs

Numero: 1

f(1)=1

C:\scripts>cscript //nologo exercici-01.vbs

Numero: 2

f(2)=1

C:\scripts>cscript //nologo exercici-01.vbs

Numero: 3

f(3)=2

C:\scripts>cscript //nologo exercici-01.vbs

Numero: 4

f(4)=3

C:\scripts>cscript //nologo exercici-01.vbs

Numero: 5

f(5)=5

C:\scripts>cscript //nologo exercici-01.vbs

Numero: 6

f(6)=8

C:\scripts>cscript //nologo exercici-01.vbs

Numero: 7

f(7)=13

C:\scripts>_

02. Introduir pel teclat un número i mostrar per pantalla la seva taula de multiplicar.

```
' Taula de multiplicar  
' cscript //nologo exercici-02.vbs
```

```
Option Explicit
```

```
Dim Num  
Dim I
```

```
WScript.stdout.write "Entra la taula de multiplicar: "  
Num = WScript.StdIn.ReadLine
```

```
For I = 0 To 10  
    WScript.Stdout.WriteLine Num & " x " & I & " = " & (Num*I)  
Next
```

```
WScript.Quit
```

C:\Windows\system32\cmd.exe

C:\scripts>cscript //nologo exercici-02.vbs

Entra la taula de multiplicar: 5

5 x 0 = 0

5 x 1 = 5

5 x 2 = 10

5 x 3 = 15

5 x 4 = 20

5 x 5 = 25

5 x 6 = 30

5 x 7 = 35

5 x 8 = 40

5 x 9 = 45

5 x 10 = 50

C:\scripts>

03. Programar un script que demani deu números enters a través del teclat i indiqui quin és el més gran.

```
' El més gran
' cscript //nologo exercici-03.vbs

Option Explicit

Dim I, Gran, Num

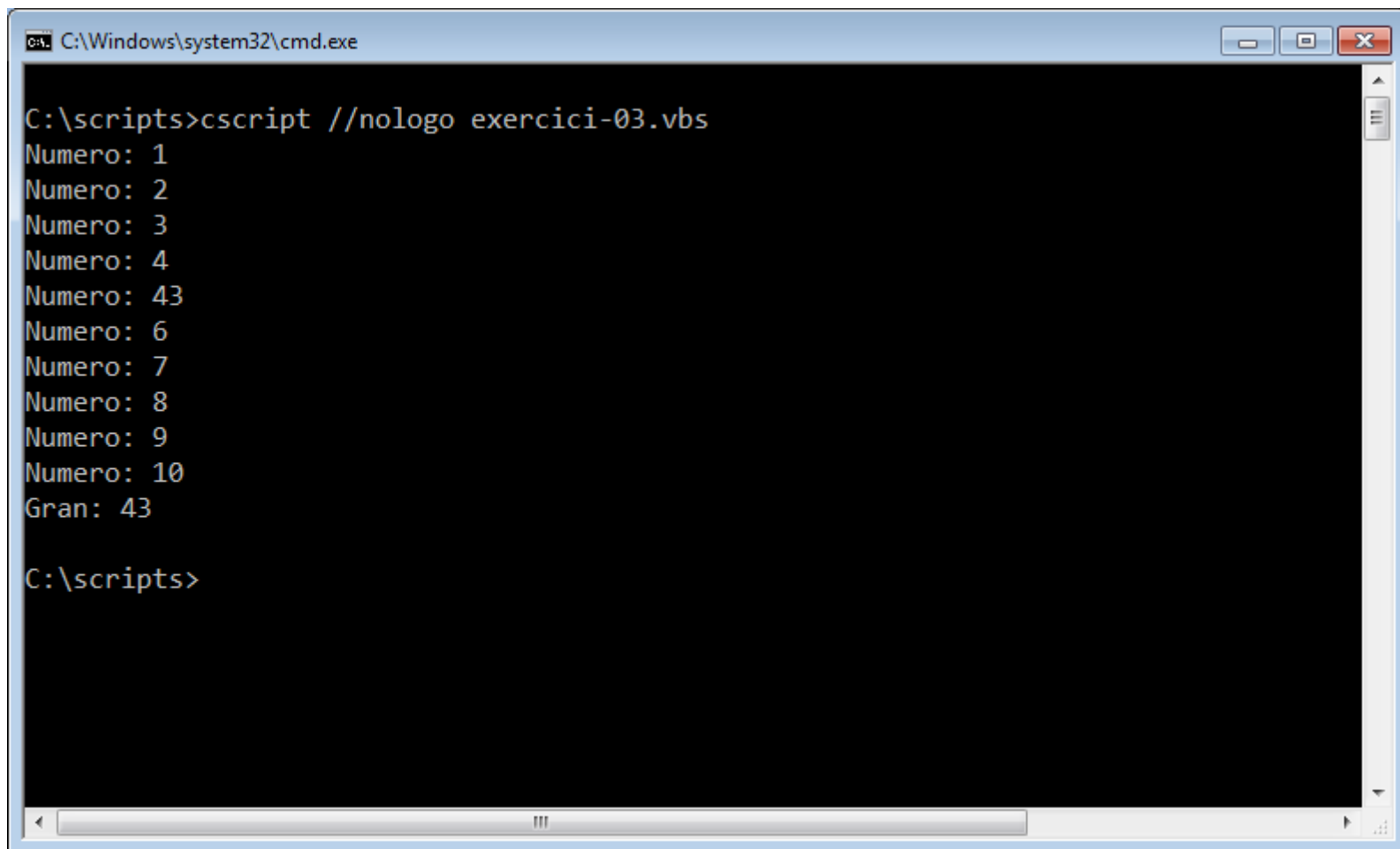
Gran = 0

For I = 1 To 10
    WScript.Stdout.Write "Numero: "
    Num=WScript.StdIn.ReadLine

    If (CInt(Num)>CInt(Gran)) Then
        Gran = Num
    End If
Next

WScript.Stdout.WriteLine "Gran: " & Gran

WScript.Quit
```



A screenshot of a Windows command prompt window. The title bar at the top reads "C:\Windows\system32\cmd.exe". The command prompt shows the following text:

```
C:\scripts>cscript //nologo exercici-03.vbs
Numero: 1
Numero: 2
Numero: 3
Numero: 4
Numero: 43
Numero: 6
Numero: 7
Numero: 8
Numero: 9
Numero: 10
Gran: 43

C:\scripts>
```

The output lists numbers 1 through 10, with 43 appearing twice (once as 'Numero: 43' and once as 'Gran: 43'). The window has a standard Windows interface with a blue title bar, minimize/maximize/close buttons, and a scrollbar on the right side.

04. Programar un script que demani deu números enters a través del teclat i indiqui quans són parells.

```
' Parells
' cscript //nologo exercici-04.vbs

Option Explicit

Dim I, Num, Parells

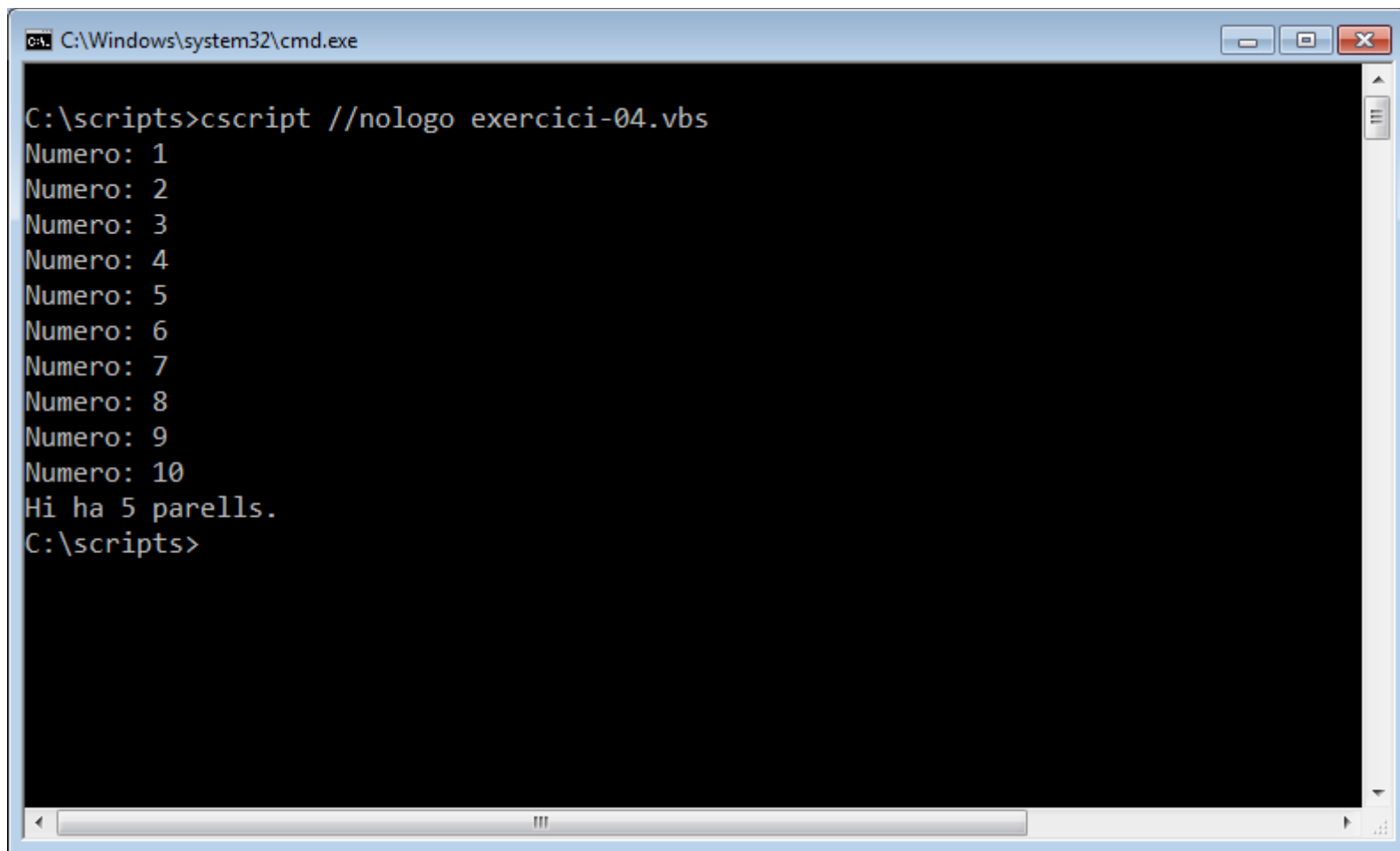
Parells = 0

For I = 1 To 10
    WScript.Stdout.Write "Numero: "
    Num=WScript.StdIn.ReadLine

    If (Num Mod 2 = 0) Then
        Parells=Parells+1
    End If
Next

Select Case Parells
    Case 0
        WScript.Stdout.Write "Cap es parell."
    Case 1
        WScript.Stdout.Write "Només un es parell."
    Case 2,3,4,5,6,7,8,9,10
        WScript.Stdout.Write "Hi ha " & Parells & " parells."
End Select

WScript.Quit
```

A screenshot of a Windows command prompt window. The title bar at the top reads "C:\Windows\system32\cmd.exe". The command prompt shows the following text:

```
C:\scripts>cscript //nologo exercici-04.vbs
Numero: 1
Numero: 2
Numero: 3
Numero: 4
Numero: 5
Numero: 6
Numero: 7
Numero: 8
Numero: 9
Numero: 10
Hi ha 5 parells.
C:\scripts>
```

The output consists of numbers 1 through 10, followed by the text "Hi ha 5 parells." (Catalan for "There are 5 even numbers"). The window has a standard Windows interface with a blue title bar, minimize/maximize/close buttons, and a scrollbar on the right side.

05. Mostrar per pantalla un taulell d'escacs.

```
' Escacs
' cscript //nologo exercici-05.vbs

Option Explicit

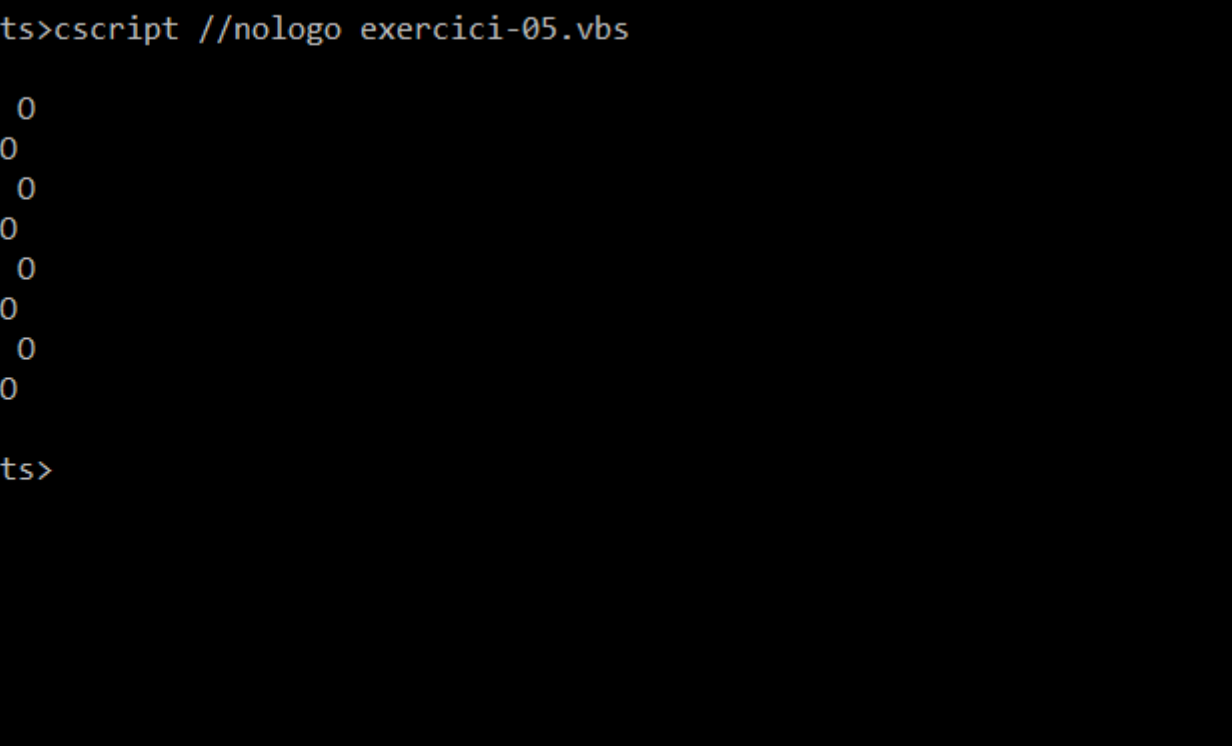
Dim I

WScript.Stdout.WriteLine ""

For I = 1 To 8

    If (I Mod 2 = 0) Then
        WScript.Stdout.WriteLine "0 0 0 0 0 "
    Else
        WScript.Stdout.WriteLine " 0 0 0 0 0"
    End If
Next

WScript.Quit
```



The screenshot shows a Windows command prompt window with the title bar "C:\Windows\system32\cmd.exe". The command prompt displays the command `C:\scripts>cscript //nologo exercici-05.vbs` and its output, which is a 10x5 grid of zeros:

```
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
```

The command prompt then returns to the `C:\scripts>` prompt.

06. Validar l'entrada pel teclat d'un valor per tal que sigui exclusivament positiu.

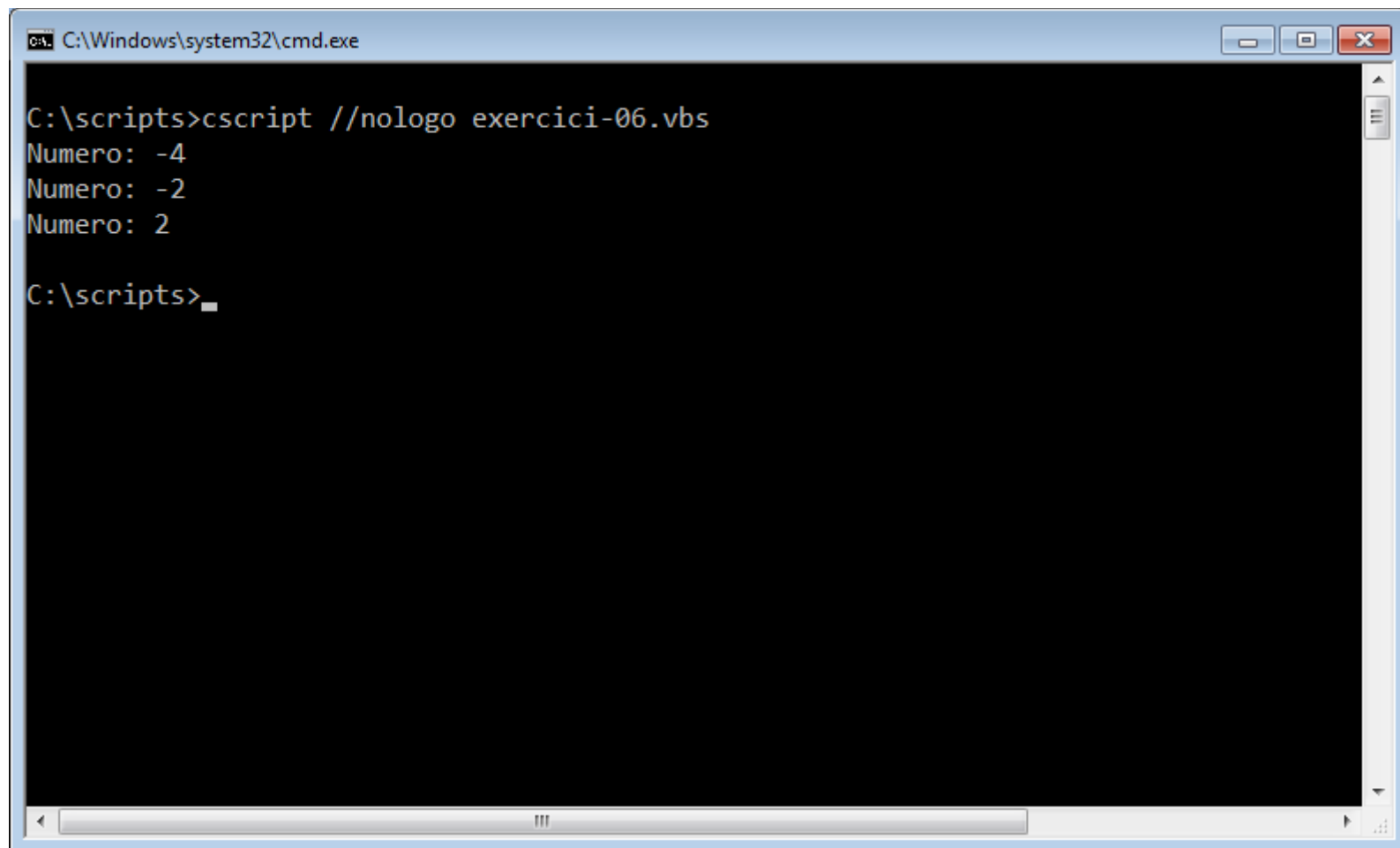
```
' Positiu
' cscript //nologo exercici-06.vbs

Option Explicit

Dim Valor

Do
    WScript.StdOut.Write "Numero: "
    Valor=CInt(WScript.StdIn.ReadLine)
Loop While (Valor<0)

WScript.Quit
```



A screenshot of a Windows command prompt window. The title bar at the top reads "C:\Windows\system32\cmd.exe". The window has standard Windows window controls (minimize, maximize, close) on the right. The command prompt shows the following text:

```
C:\scripts>cscript //nologo exercici-06.vbs  
Numero: -4  
Numero: -2  
Numero: 2  
  
C:\scripts>_
```

The output shows three lines of text: "Numero: -4", "Numero: -2", and "Numero: 2". The cursor is on the line "C:\scripts>_".

07. Programar un script que demani números enters pel teclat, fins que rebi un 0, per a després indicar quans són parells.

```
' Parells
' cscript //nologo exercici-07.vbs

Option Explicit

Dim Valor, Parells

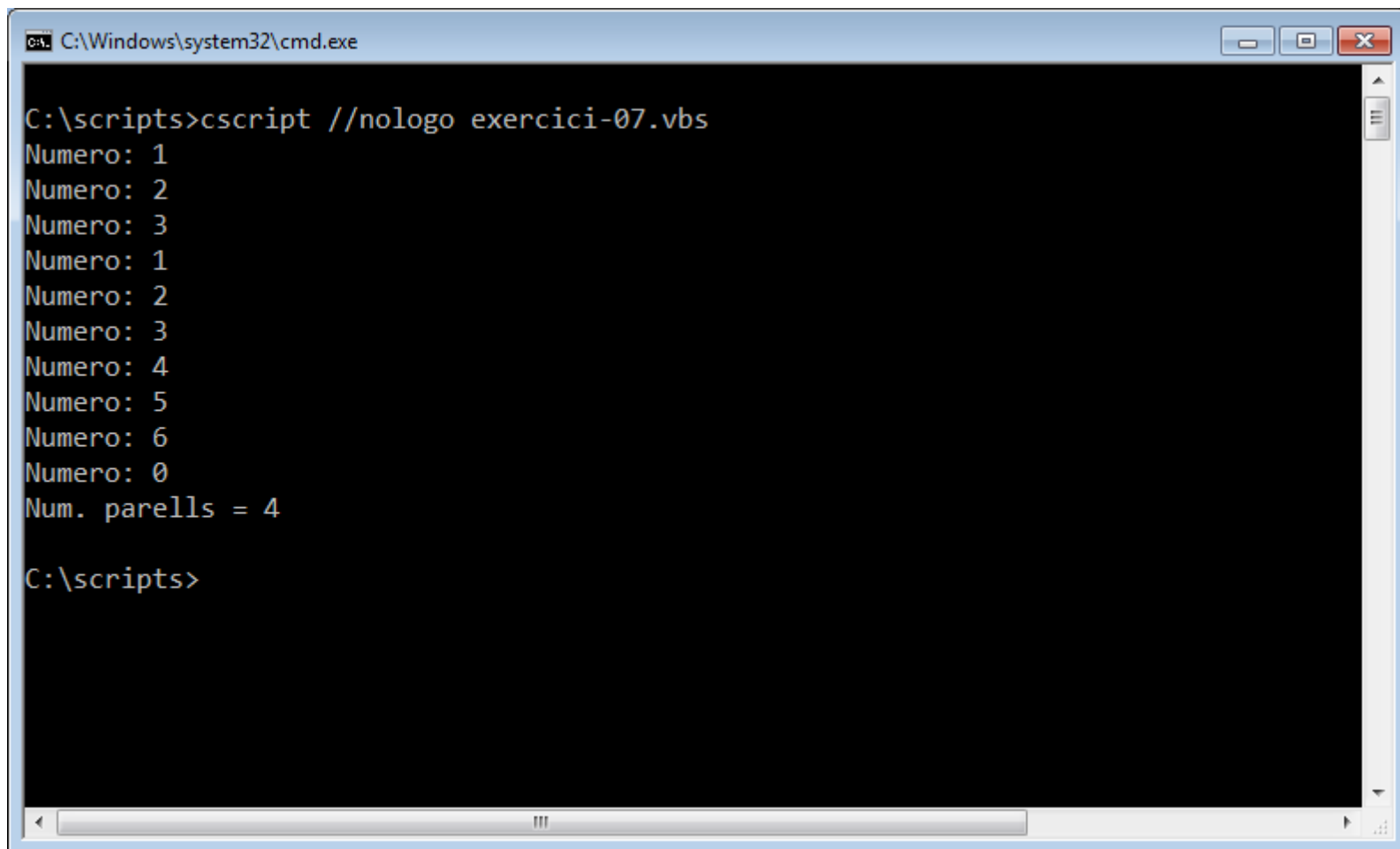
Parells=0

Do
    WScript.Stdout.Write "Numero: "
    Valor=CInt(WScript.StdIn.ReadLine)

    If (Valor Mod 2 = 0) Then
        If (Valor <> 0 ) Then
            Parells=Parells+1
        End If
    End If
Loop While (Valor<>0)

WScript.Stdout.WriteLine "Num. parells = " & Parells

WScript.Quit
```



A screenshot of a Windows command prompt window. The title bar at the top reads "C:\Windows\system32\cmd.exe". The command prompt shows the following text:

```
C:\scripts>cscript //nologo exercici-07.vbs
Numero: 1
Numero: 2
Numero: 3
Numero: 1
Numero: 2
Numero: 3
Numero: 4
Numero: 5
Numero: 6
Numero: 0
Num. parells = 4

C:\scripts>
```

The output consists of ten lines of "Numero:" followed by a number, and a final line "Num. parells = 4". The numbers are 1, 2, 3, 1, 2, 3, 4, 5, 6, and 0. The window has a standard Windows interface with a blue title bar, minimize/maximize/close buttons, and a scrollbar on the right side.

08. Programar un script que demani números enters pel teclat, fins que rebi un 0, per a després indicar quans són majors que 0.

```
' Més grans que 0
' cscript //nologo exercici-07.vbs

Option Explicit

Dim Valor, Grans

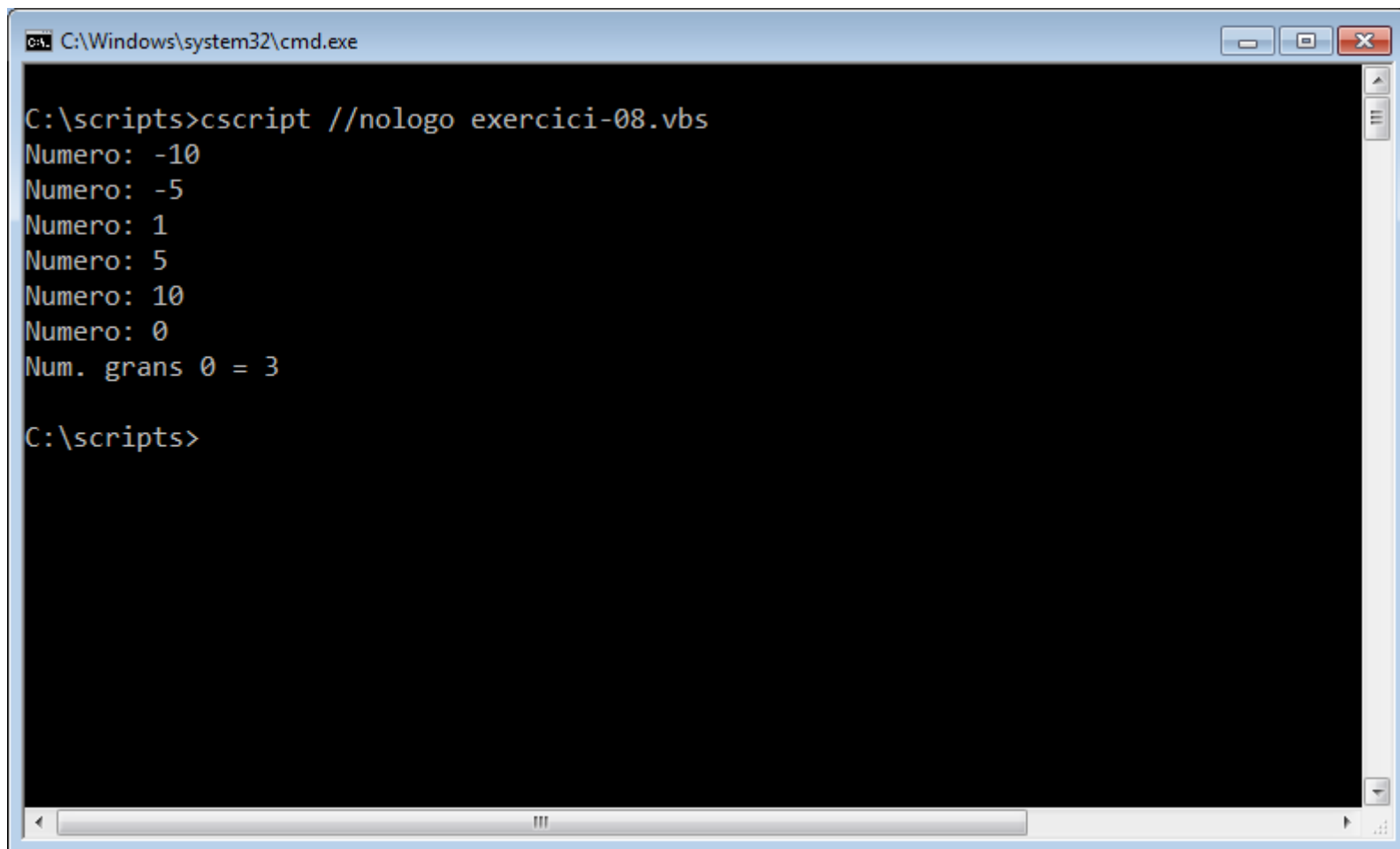
Grans=0

Do
    WScript.Stdout.Write "Numero: "
    Valor=CInt(WScript.StdIn.ReadLine)

    If (Valor>0) Then
        Grans=Grans+1
    End If
Loop While (Valor<>0)

WScript.Stdout.WriteLine "Num. grans 0 = " & Grans

WScript.Quit
```

A screenshot of a Windows command prompt window. The title bar at the top reads "C:\Windows\system32\cmd.exe". The command prompt shows the following text:

```
C:\scripts>cscript //nologo exercici-08.vbs  
Numero: -10  
Numero: -5  
Numero: 1  
Numero: 5  
Numero: 10  
Numero: 0  
Num. grans 0 = 3  
  
C:\scripts>
```

The window has a standard Windows interface with a blue title bar, minimize, maximize, and close buttons in the top right corner, and a scroll bar at the bottom.