Ejercicio 1

|  |  |  |  |
| --- | --- | --- | --- |
| **Iteracion** | **J** | **i** | **Salida** |
| 0 | 0 | 10 |  |
| 1 | 10 |  |  |
| 1 |  |  | 10 |
| 1 | 9 |  |  |
| 1 |  | 9 |  |
| 2 | 9 |  |  |
| 2 |  |  | 9 |
| 2 | 8 |  |  |
| 2 |  | 8 |  |
| 3 | 8 |  |  |
| 3 |  |  | 8 |
| 3 | 7 |  |  |
| 3 |  | 7 |  |
| … |  |  |  |
| 10 | 1 |  |  |
| 10 |  |  | 1 |
| 10 | 0 |  |  |
| 10 |  | 0 |  |
| 11 | ---- | ---- | ---- |

Ejercicio 2

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Iteracion** | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **X** |
| 1 | 3 | 6 | 5 | 10 | 4 | 1 | 5 |  |
| 1 |  |  |  |  |  |  |  | 1 |
| 1 | FALSE | FALSE |  |  |  |  |  |  |
| 1 |  |  |  |  |  |  |  | 4 |
|  |  |  |  |  |  |  |  |  |
| 2 | 7 | 7 | 5 | 15 | 1 | 15 | 1 |  |
| 2 |  |  |  |  |  |  |  | 1 |
| 2 | TRUE | FALSE |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  | 4 |
|  |  |  |  |  |  |  |  |  |
| 3 | 8 | 9 | 1 | 15 | 18 | 5 | 4 |  |
| 3 |  |  |  |  |  |  |  | 1 |
| 3 | TRUE | TRUE |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  | 0 |
| 3 |  |  | FALSE | TRUE | FALSE |  |  |  |
| 3 |  |  |  |  |  | TRUE | TRUE |  |
| 3 |  |  |  |  |  |  |  | 0 |
|  |  |  |  |  |  |  |  |  |
| 4 | 8 | 8 | 1 | 15 | 18 | 6 | 4 |  |
| 4 |  |  |  |  |  |  |  | 1 |
| 4 | TRUE | TRUE |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  | 0 |
| 4 |  |  | FALSE | TRUE | FALSE |  |  |  |
| 4 |  |  |  |  |  | TRUE | TRUE |  |
| 4 |  |  |  |  |  |  |  | 0 |

Ejercicio 3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Iteracion** | **I** | **J** | **K** | **SALIDA** |
| 0 | 1 | 1 | 1 |  |
| 0 | 0 |  |  |  |
| 0 |  | 0 |  |  |
| 1 | 1 |  |  |  |
| 1 |  |  | 2 |  |
| 1 |  | 1 |  |  |
| 2 | 2 |  |  |  |
| 2 |  | 0 |  |  |
| 2 |  |  | 4 |  |
| 2 |  | 1 |  |  |
| 2 |  |  | 7 |  |
| 2 |  | 2 |  |  |
| 3 | 3 |  |  |  |
| 3 |  | 0 |  |  |
| 3 |  |  | 10 |  |
| 3 |  | 1 |  |  |
| 3 |  |  | 14 |  |
| 3 |  | 2 |  |  |
| 3 |  | BREAK |  |  |
| 4 | 4 |  |  |  |
| 5 | BREAK | BREAK | 14 | 14 |

Ejercicio 4

|  |  |  |  |
| --- | --- | --- | --- |
| **Iteracion** | **A** | **B** | **RESULTADO** |
| 0 | 5 | 2 |  |
| 1 | 3 | 2 |  |
| 2 | 1 | 2 |  |
| 2 |  |  | 1 |
| 3 |  |  | 1 |
| 4 |  |  | 1 |
| RETURN |  |  | 1 |

Ejercicio 5

Error de bucle infinito ya que si el num introducido es mayor a i = 10 o j = 5 se produciría un bucle infinito, el código corregido seria este:

static void Main(string[] args)

{

int i, j;

do

{

do

{

Console.WriteLine(j + "\*" + i "="+ j\*i);

i=i+1;

j=j+1;

}

while(i<=10)

while(j<=5)

}

Ejercicio 6

static void Main(string[] args)

{

int i=0;

while(i<4)

switch(i)

{

case 0: case 1: case 2:

i++; break;

case 3:

i--; Console.write(i);

case 4:

i=i+2; Console.write(i);

default:

Console.write(i);

}

}

|  |  |
| --- | --- |
| 0 | i = 0 |
| 1 | I++; I = 1 |
| 2 | I++; I = 2 |
| 3 | I++; I = 3 |
| 4 | i--; I = 2 |

Se producirá un bucle infinito ya que cuando i == 3 se hace i—provocando que vuelva a su estado anterior, así infinitamente sin tener un método para finalizar el proceso así como se enseña en la tabla de arriba

Ejercicio 7

namespace ConsoleApplication1

{

class Program

{

static void Main(string[] args)

{

int j = 2;

int s = 0;

int n;

n = Int32.Parse(Console.ReadLine());

while(j<=n/2)

if (n / j == 0) { s = s + 1; j = j + 1; }

if (s == 0) Console.Write(n + "es primo");

else Console.Write(n + "no es primo");

}

}

}

1. El primer if es inaccesible ya que para que el resultado sea 0 n tiene que ser menor que j, cosa que no permite la ejecución del bucle principal, s no cambia de valor y con lo que siempre es primo

namespace ConsoleApplication1

{

class Program

{

static void Main(string[] args)

{

int j = 2;

int s = 0;

int n;

n = Int32.Parse(Console.ReadLine());

while(j<=n/2) { if (n % j == 0) { s ++; } j++; }

if (s == 0) { Console.Write(n + "es primo"); }

else { Console.Write(n + "no es primo"); }

}

}

}



|  |  |  |  |
| --- | --- | --- | --- |
| **Iteracion** | **J** | **N** | **S** |
| 0 | 2 | 11 | 0 |
| 1 | 3 |  | 0 |
| 2 | 4 |  | 0 |
| 3 | 5 |  | 0 |
| 7 | 11 | 11 | 0 |
| 4 |  |  |  |
| RETURN |  |  | 11 no es primo |