TALLER DE COMPLEJIDAD CICLOMATICA

Cristian Steeven colorado Cordoba

Kleyver Calle Bello

Juan Esteban Molina

WALTER HUGO ARBOLEDA MAZO

Verificación y validación de software

Universidad Catolica Luis Amigó
Medellín
2022

https://github.com/ccolorac/Taller-complejidad.git

```
class Punto7
{
    static void Main(string[] args)
    {
        int a = 20;
        int b = 25;
        if (a > b)
        {
            Console.WriteLine("A es mayor que B");
        }
        else if (a==b)
        {
            Console.WriteLine("A es igual a B");
        }
        else
        {
            Console.WriteLine("A es menor que B");
        }
    }
}
```

```
class Punto8
{
    static void Main(string[] args)
    {
        Boolean a=true, b=true, c=true, d=true, e=true ;
        int x;
        if (a && b)
        {
            x = 0;
        }
        if(a && !b && c)
        {
            x = 1;
        }
        if(a && !b && !c)
        {
            x = 3;
        }
        if(!a)
        {
            x = 4;
        }
        if(!a && d && e)
        {
            x = 5;
        }
        if (!a && d && !e)
        {
            x = 6;
        }
        if(!a && !d)
        {
            x = 7;
        }

    }

}
```

```
class Punto9
{
    static void Main(string[] args)
    {
    if ((y<a)^((a<b)^(b<c)))
    {
        x=0;
    }
    else
    {
        if((a<=y)^(y<b))
        {
            x=1;
        }
        else
        {
            if((b<=y)^(y<c))
            {
                x=2;
            }
            else
            {
                if((c<=y))
                {
                    x=3;
                }
                else
                {
                    x=4;
                }
            }
        }
    }

    }
}
```

```
class Punto10
{
    static void Main(string[] args)
    {
        int ni, est;
        String nom;
        float pat, pagmant=50000;

        Console.WriteLine("Introduzca el número de la inscripción: ");
        ni = Convert.ToInt32(Console.ReadLine());

        Console.WriteLine("Introduzca su nombre: ");
        nom = Console.ReadLine();

        Console.WriteLine("Introduzca su patrimonio: ");
        pat = Convert.ToInt32(Console.ReadLine());

        Console.WriteLine("Introduzca su estreato social: ");
        est = Convert.ToInt32(Console.ReadLine());

        if (pat>2000000)^(est>3)
        {
            pagmant= pagmant+0.03*pat;
        }

        console.WriteLine("El estudiante con número de inscripción" + ni + "y nombre:" + nom + "debe pagar: $" + pagmant)

    }
}
```

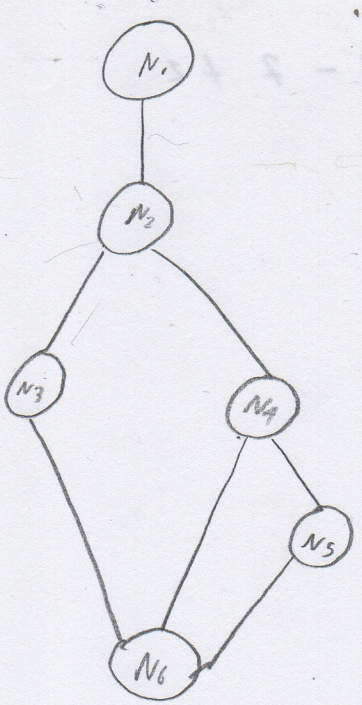
```
class Punto11
{

    static void main (string[] args)
    {
        int n1,n2,n3,mayor;

        Console.WriteLine("Introduzca el primer número: ");
        n1 = Convert.ToInt32(Console.ReadLine());

        Console.WriteLine("Introduzca el segundo número: ");
        n2 = Convert.ToInt32(Console.ReadLine());

        Console.WriteLine("Introduzca el tercer número: ");
        n3 = Convert.ToInt32(Console.ReadLine());

        if((n1>n2)^(n1>n3))
        {
            mayor=n1;
        }
        else
        {
            if(n2>n3)
            {
                mayor=n2;
            }
            else
            {
                mayor=n3;
            }
        }

        console.WriteLine("El valor mayor entre: " + n1 + n2 + "y " + n3 "es: " + mayor)

    }

}
```

```
class Punto12
{
    static void Main(string[] args)
    {
    string nom;
    int nht, het, hee8;
    float vhn, salario;


    Console.WriteLine("Introduzca su nombre: ");
    nom = Console.ReadLine();


    Console.WriteLine("Introduzca el número de horas trabajadas: ");
    nht = Convert.ToInt32(Console.ReadLine());

    Console.WriteLine("Introduzca el número de horas trabajadas: ");
    vhn = Convert.float(console.ReadLine());

    if(nht>40)
    {
        het=nht - 40;

        if(het>8)
        {
            hee8=het-8
            salario=40*vhn+16*vhn+hee8*3*vhn;
        }
        else
        {
            salario=40*vhn+het*2*vhn;
        }

    else
    {
        salario=nht*vhn;
    }

    }

    console.WriteLine("El trabajador" + nom + "devengo: $ " + salario)
    }
}
```

```
class Punto13
{
    static void main(string[] args)
    {

        fload valcomp, valpag, pdes;
        string color;

        Console.WriteLine("Introduzca el valor de la compra: ");
        valcomp = Convert.float(console.ReadLine());

        Console.WriteLine("Introduzca el color: ");
        color = Console.ReadLine();

        if(color="blanco")
        {
            pdes=0;
        }
        else
        {
            if(color="verde")
            {
                pdes=10;
            }
            else
            {
                if(color="amarillo")
                {
                    pdes=25;
                }
                else
                {
                    if(color="azul")
                    {
                        pdes=50;
                    }
                    else
                    {
                        pdes=100;
                    }
                }
            }
        }

        valpag =valcomp - pdes*valcomp/100
        console.WriteLine("El cliente debe pagar: $ " + valpag)
    }
}
```

Punto 7:

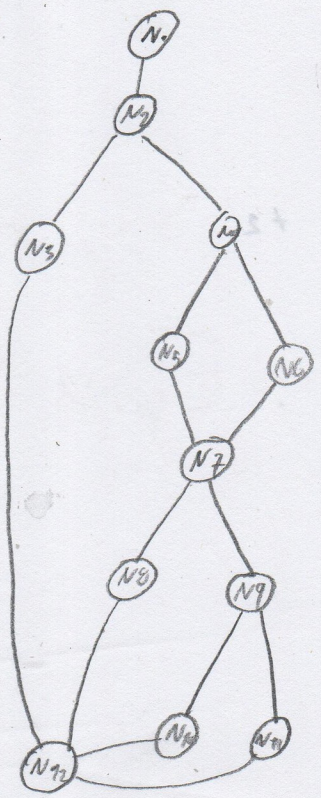
$V(G) = \text{Aristas} - \text{Nodos} + 2$



$V(G) = 7 - 6 + 2$

$V(G) = 3$

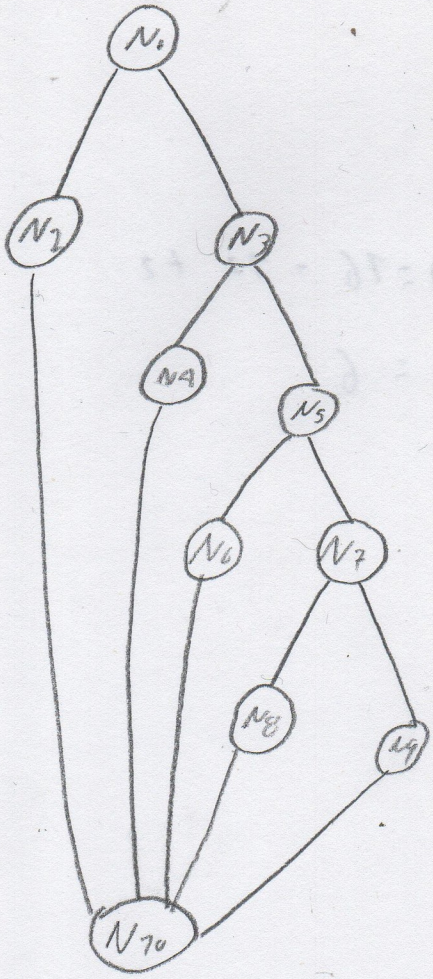
Punto 8:



$V(G) = 15 - 12 + 2$

$V(G) = 5$

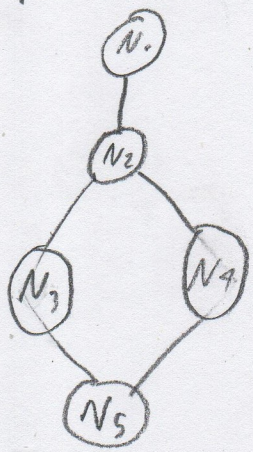
Punto 9



$V(G) = 13 - 10 + 2$

$V(G) = 5$

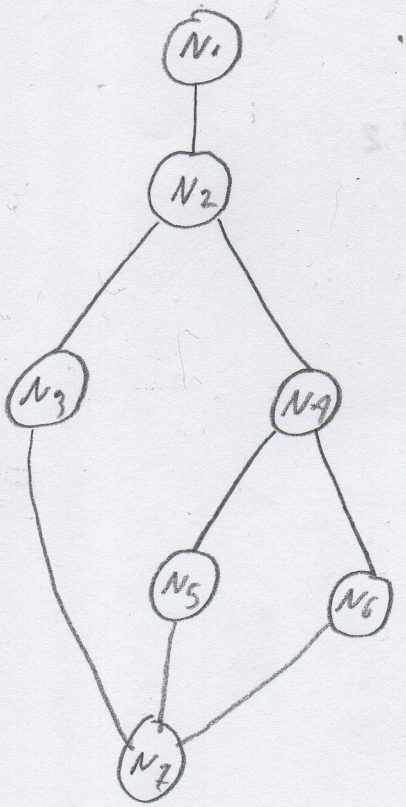
Punto 10



$V(G) = 5 - 5 + 2$

$V(G) = 2$

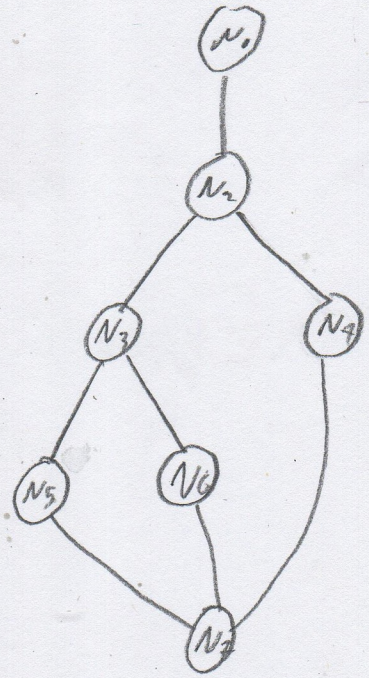
Punto 11



$V(G) = 8 - 7 + 2$

$V(G) = 3$

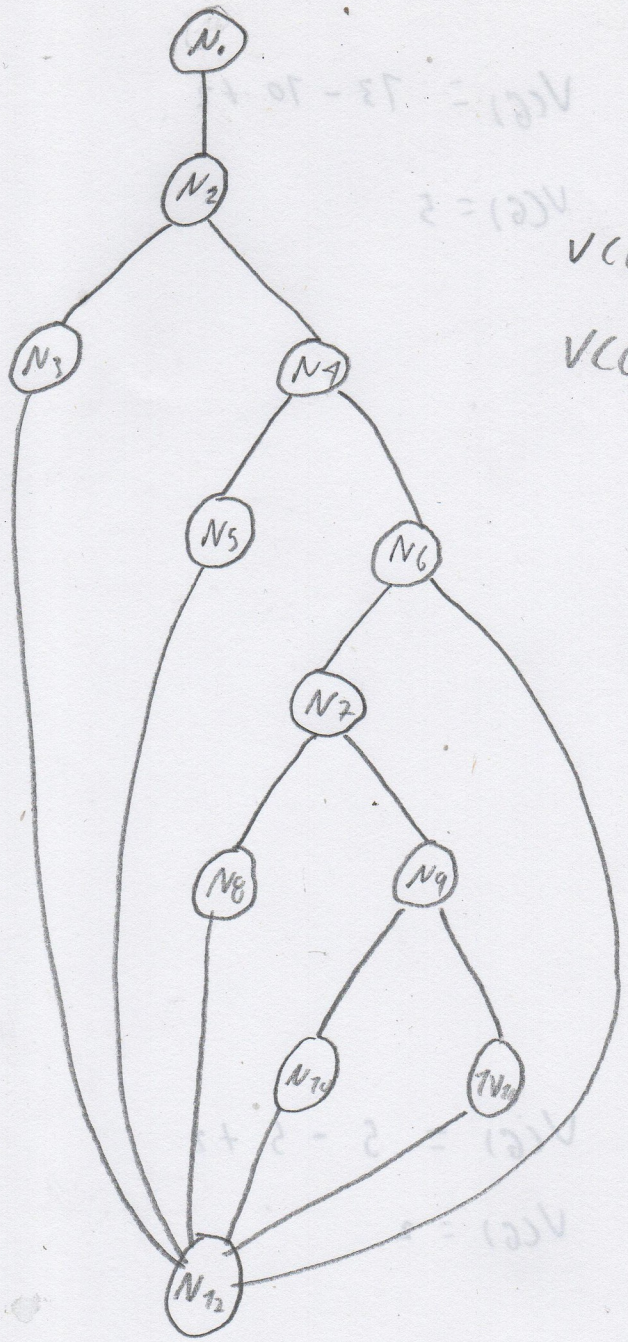
Punto 12



$V(G) = 8 - 7 + 2$

$V(G) = 3$

Punto 13

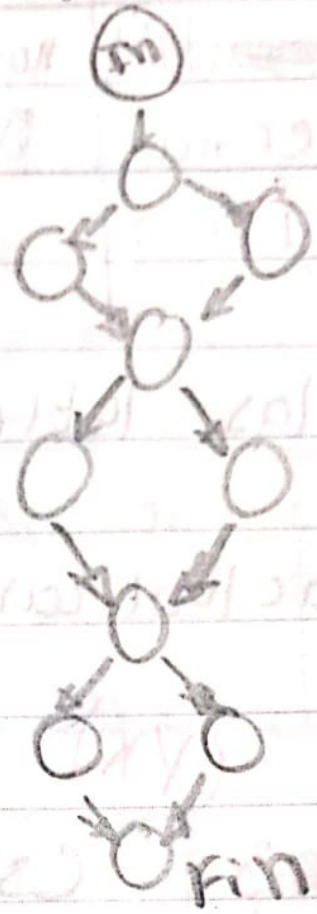
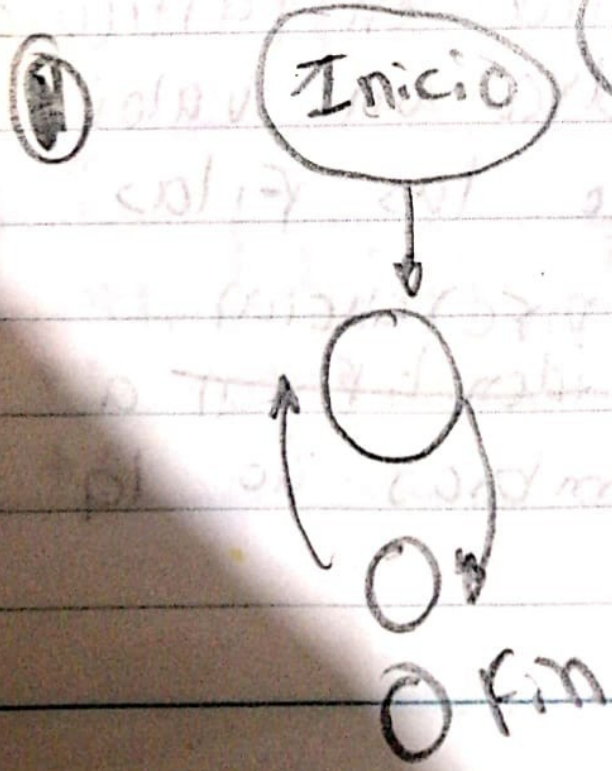


$V(G) = 16 - 12 + 2$

$V(G) = 6$

17

14



15