

Soluciones Trazas de métodos

```

/*****
* traza_1
*****/

```

```

int i, a = 1234;
for(i = 0; i < 4; i++){
    fnx(a=a/10);
}

public static void fnx(int x){
    if(x!=0) System.out.print(x + " ");
}

```

main		fnx			
i	a	x	salida		
0	1234	123	123	12	1
1	123	12			
2	12	1			
3	1	0			
4	0				

```

/*****
* traza_2
*****/

```

```

int x;
for(x = 0; x < 3; x++){
    fnx(x);
}

public static void fnx(int x){
    int i;
    for(i = x; i > 0; i--){
        System.out.print(i + " ");
    }
}

```

main		fnx			
x		x	i	salida	
0		0	0	1	2 1
1		1	1		
2		2	0		
3			2		
			1		
			0		

```

/*****
* traza_3
*****/

```

```

int i, x = 65;
for(i = 0; i < 3; i++){
    fnx(x++);
}

public static void fnx(int x){
    System.out.print(x + " ");
}

```

main		fnx			
i	x	x	salida		
0	65	65	65	66	67
1	66	66			
2	67	67			
3	68				

```

/*****
* traza_4
*****/

```

```

int a, b, c;
a = 11;
b = 12;
c = 13;
metodo(a, b, c);
System.out.println(a + " " + b + " " + c);

```

main				metodo			
a	b	c	salida	a	b	c	
11	12	13		11	12	13	
			11 12 13	1	2	3	

```

public static void metodo(int a, int b, int c){
    a = 1;
    b = 2;
    c = 3;
}

```

Trazas de métodos recursivos

```

/*****
 * traza_5
 *****/
int n = 4;
f(n);

public static void f(int a){
    if(a==0)
        return;
    else{
        f(a-1);
        System.out.print(a + " ");
        return;
    }
}

```

main		f		
n	f(n)	a	Llamada recursiva	Salida
4	f(4)	4	f(3)	4
		3	f(2)	3
		2	f(1)	2
		1	f(0)	1
		0	-	

El programa muestra: 1 2 3 4

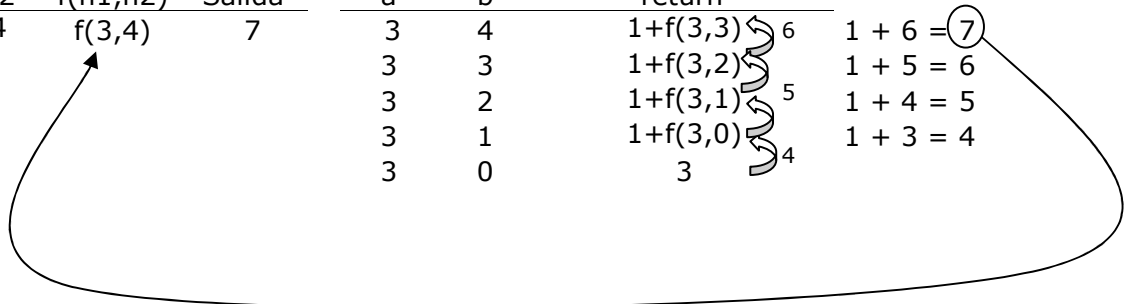
```

/*****
 * traza_6
 *****/
int n1=3,n2=4;
System.out.println(f(n1,n2));

public static int f(int a, int b){
    if(b==0)
        return a;
    else
        return 1 + f(a,b-1);
}

```

main				f		
n1	n2	f(n1,n2)	Salida	a	b	return
3	4	f(3,4)	7	3	4	1+f(3,3)
				3	3	1+f(3,2)
				3	2	1+f(3,1)
				3	1	1+f(3,0)
				3	0	3

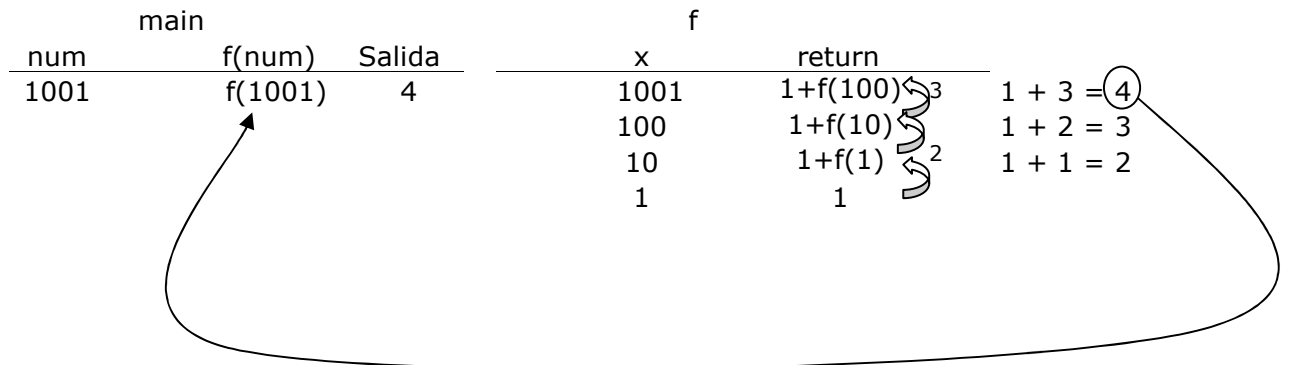


```

/*****
 * traza_7
 *****/
int num=1001;
System.out.println(f(num));

public static int f(int x){
    if(x<10)
        return 1;
    else
        return 1 + f(x/10);
}

```



```

/*****
 * traza_8
 *****/
int n1=2,n2=3;
System.out.println(f(n1,n2));

public static int f(int a, int b){
    if(b==0)
        return 0;
    else
        return a + f(a,b-1);
}

```

