

recursivo.c

```
#include <stdio.h>
```

```
unsigned int somatoria (unsigned int n)
{
    if (n==1) return 1;
    return somatoria(n-1) + n;
}
```

```
unsigned int somatoriaTR (unsigned int n, unsigned int s)
{
    if (n==1) return s+1;
    return somatoriaTR(n-1, s+n);
}
```

```
unsigned int digitos (unsigned int n)
{
    if (n<10) return 1;
    return digitos(n/10) + 1;
}
```

```
unsigned int digitosTR (unsigned int n, unsigned int d)
{
    if (n<10) return d+1;
    return digitosTR(n/10, d+1);
}
```

```
unsigned int soma_digitosTR (unsigned int n, unsigned int d)
{
    if (n<10) return d+n;
    return soma_digitosTR(n/10, d+n%10);
}
```

```
int primoTR (unsigned int x, unsigned int n)
{
    if (x<2) return 0;
    if (n==1) return 1;
    if (x%n == 0) return 0;
    return primoTR(x, n-1);
}
```

```
int primo (unsigned int x)
{
    return primoTR(x, x-1);
}
```

```
int main ()
{
    printf("%u\n", somatoria(10));
    printf("%u\n", somatoriaTR(10, 0));
    printf("%u\n", digitos(123456));
    printf("%u\n", digitosTR(123456, 0));
    printf("%u\n", soma_digitosTR(123456, 0));
    printf("%d\n", primo(324));
    printf("%d\n", primo(197));
}
```

```
    return 0;  
}
```