void F (char ch)       // assume ASCII representation of characters
{   if ((( 'A' <= ch) and (ch <= 'H'))
    {     F (ch -1);
        cout << ch; }
    else
        cout << endl;
}

Show what output will be produced by the following function calls.
1.  F('C')
2.  F('3')

Determine what is calculated by tracing the following recursive functions.

3.  Trace F(4)
    int F ( int n)
    {   if ( n == 0 ) return 1;
        else return ( n * F (n-1)) ; }

4.  Trace F(16)
    int F (int n)
    {     if ( n < 2 ) return 0;
        else return ( 1 + F( n/2));}

5.  Trace F (-2365)
    int F (int n)
    {     if ( n < 0) return F(-n);  
        if ( n < 10) return n;
        else return F (n/10);   }

Write recursive functions to solve the following problems then trace with the given value(s).

6.  Return the number of digits in a nonnegative integer.  Trace for 56798

7.  Write PrintReverse ( ) that displays an integer’s digits in reverse order.  Trace for 567.

8.  Complete the function and trace for A[ 2, 4, 5, 7, 8, 11]
    int SumArray ( int A[ ], int n )