In c

#include<stdio.h> //fputc, stdout, stderr

//char message[] = “Hello World\n” //data section

// string length is 12 but 13 characters are needed ( 13 bytes)

int writeline (const char \* *message*, FILE \* *stream*);

{

int index = 0; //counter for printing characters

//loop of printing characters

while ( message[index] != 0 ) {

fputc (message[index], stream);

index++;

}

//return you do

}

baseout

123 parameter = need ‘1’ ‘2’ ‘3’ 49, 50, 51, 0x30 0x31 0x32

123 %10 gives 3 transform into ‘3’ (use the digits array): hint: digits[remainder]

123/10 gives 12

12 %10 gives 2 … becomes ‘2’

12/10 gives 1

1%10 gives 1 … become ‘1’

1/10 gives 0 … loop terminates

observe: we wanted ‘1’ ‘2’ ‘3’, but we got them in reverse order

Many ways:

1. store those characters into an array incrementing array index

char array[BUFSIZ]; // an empty array in C

and then printing them from the array decrementing array index

1. store the numbers from the back of the array decrementing the index

and print them forward.

1. store a NULL character at the back of the array (C only)

then store the number from the back of the array decrementing index

you have formed a string that can be displayed by calling writeline:

writeline (&array[index],stream); // index is where you left off