/\* Count the number of 1s in a 32-bit word \*/

#include <stdio.h>

unsigned int x, TEST\_DATA, RESULT;

int main()

{

while(1)

{

scanf("%d", &TEST\_DATA);

RESULT = 0;

x = TEST\_DATA;

while (x != 0)

{

if ((x & 0x80000000) > 0) RESULT++;

x = x << 1;

}

printf( "The number of 1s is: %d \n", RESULT );

}

return 0;

}