```c
#include <stdio.h>
#include <unistd.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>

#define MAX_N 60
#define SUCCESS 1

void part1(float num[], int length)
{

    float product;
    int K = 0;
    int flag = 0;
    int zero_flag = 0;
    printf("The numbers are:\n");
    for (int i = 0; i < length ; i++)
    {
        printf("Number %d %e \n",i + 1,num[i]);
        if (num[i] == 0)
            zero_flag = 1;
    }
    if(zero_flag == 1)
        printf("The result is zero times K to the power of 0\n");

    while(!flag)
    {
        product = num[0];
        for(int i = 1; i < length; i++)
        {
            product *= num[i];
        }
        // If the numbers overflow, divide by 10 to scale
        // and retry the multiplication
        if(product == INFINITY){
            for(int i = 0; i < length; i++)
            {
                num[i] /= 10;
            }
            K += length;
        }
        else if(product == 0)
        {
            for(int i = 0; i < length; i++)
            {
                num[i] *= 10;
            }
            K -= length;
        }
        else{
            flag = 1;
            printf("The product is: %.6e times 10 to the power of %d \n", product,K);
        }
        if(abs(K) == INFINITY)
        {
            flag = 1;
        }
    }

}

int main(void)
{
```

```
65      float num[3] = {powf(10,30), powf(10,30), powf(10,1)};
66      part1(num,3);
67      return SUCCESS;
68  }
```