#include <iostream>

#include <vector>

#include <math.h>

int main () {

int n, m;

std::cin >> m;

std::cin >> n;

double x[m];

for (int l = 0; l < m; l++) {

double f;

std::cin >> f;

x[l] = f; }

std::vector<std::vector<double> > mat ( n , std::vector<double>( m, 0));

for ( int i = 0; i < m; i++)

for (int j = 0; j < n; j++) {

mat [i][j] = pow(x[i] , j); }

for (int i = 0 ; i < m ; ++i) {

for (int j = 0 ; j < n ; ++j)

std::cout <<mat [ i ] [ j ] << " " ;

std::cout << "\n" ; }

return 0; }