#include<iostream>

#include<cmath>

using namespace std;

int main()

{

int n,b;

cin>>n;

for(;;)

{ b=n%2; //得出余

n=n/2; //得出商

cout<<"shang:"<<n<<" "<<"yu:"<<b<<endl;

if(n==0)

break;

}

return 0;

}