let UserInput=[2,10,1,3,4,5,6,7,8,9,20,30,67,100];

let length=UserInput.length;

let frequency=0;

let x=0;

let ListInputChange;

let ListInput2Change=1;

ListInputChange=UserInput[0];

function process(){

if(ListInputChange==-1){

return;

}

for(i=0;i<ListInputChange;i++){

if(ListInputChange>ListInput2Change){

for(k=0;k<=(ListInputChange-ListInput2Change);k++){

ListInput2Change=ListInput2Change\*2;

frequency++;

if(ListInput2Change==UserInput[0]){

x++;

console.log('Case'+x+':'+frequency);

removed = UserInput.splice(0,1);

frequency=0;

ListInput2Change=1;

ListInputChange=UserInput[0];

}

else if((ListInputChange-ListInput2Change)<ListInput2Change){

frequency++;

x++;

console.log('Case'+x+':'+frequency);

removed = UserInput.splice(0,1);

frequency=0;

ListInput2Change=1;

ListInputChange=UserInput[0];

}

}

}

else if(ListInputChange==1){

x++;

console.log('Case'+x+':'+frequency);

removed = UserInput.splice(0,1);

frequency=0;

ListInput2Change=1;

ListInputChange=UserInput[0];

}

}

}

for(j=0;j<length;j++){

process();

}