Byte of Chocolate

Lab 3
Computer Programming
Due date: During Labs, 4-5PM

Problem Statement: Alice and Bob both are computer science student and share common love for chocolates. They have weird obsession with chocolate. They will eat chocolate if and only if **the number of pieces are exact power of 2**. One day, they come across a chocolate piece and decide to share the piece by breaking it into two parts. Since they cannot think anything other than the chocolate, help them to cut the piece in such a way that they both can eat the chocolate such that their obsession is satisfied.
Note: Alice's is older so her chocolate cannot have pieces less pieces than Bob's chocolate.

Input
The first line of input is T denoting the number of test cases. The next T lines have one integer M, indicating the number of pieces in the chocolate they found.
Output
For each test case, output:
1) "Yes" if the chocolate can be divided, followed by two space separated integers "a b"(without quotes) where a is the number of pieces Alice gets and b is the number of pieces Bob get
2) "No" on new line if the chocolate cannot be divided

Constraints
$0 \leq T \leq 1000000$
$0 \leq M \leq 10^9$

Sample Test Case

Input	Output
3 3 5 7	Yes 2 1 Yes 4 1 No