SORTING AND SEARCHING – 20 QUESTIONS GAME - 01

Hey amit lets play a game, what game? It's called twenty questions game what!!? You have to keep a number in your mind between say one to ten thousand ok and i will guess it right less than twenty attempts, less than twenty attempts!! Yeah. I don't think it's possible oh it is very easy. Ok the rules goes like this i will ask whether the number is less than equal to or greater than some number so you have to just say yes or no or it is less than or equal to or greater than, you will ask me whether my number is less than, equal to, greater than your some random number yeah yeah. I will say a number, ok let's try this say you keep five and will start from one to ten, one to twenty i will ask whether your number is less than ten, you have to yes then i will ask again some questions sure let's play this, yeah? Yeah i will crack this in less than twenty attempts ready? Will see ok keep some number ok i have, between one to ten thousand? Yeah. Is your number less than five thousand or equal to five thousand or greater than five thousand? Less than five thousand. Less than five thousand, ok so is your number less than two thousand five hundred, equal to or greater than two thousand five hundred? Less than two thousand five hundred. Less than! Cool, now is it less than thousand two fifty equal to two fifty thousand two fifty or greater than thousand two fifty? Less than thousand two fifty, less than ok. Again is it less than equal to greater than six twenty five? Hmmm less than. Awesome, i don't think you will crack in twenty attempts, ah no wait. Is it less than equal to greater than three twelve? Less than three twelve. Awesome, less than equal to greater than one fifty six? Less than. Hmmm now it's getting closer, is it less than equal to greater than seventy eight? Less than. Ok less than equal to greater than thirty nine? Less than thirty nine. Awesome, is it less than equal to greater than nineteen? Less than nineteen. Is it less than equal to greater than nine? Greater than nine, so it's greater than nine, is it less than equal to greater than fourteen? It's exactly fourteen yaar! Yeah wow i cracked in eleven questions see; exactly eleven how is it even possible? What's the logic behind this yaar? That's a good question.