# Warm-up task (1st riddle in the 1st treasure hunting process)

**We are searching for a 4-digit number. If the number composed from its first 3 digits (starting from left) then the one from first 2 digits and then the first digit will be subtracted from the original value step by step, then the result is 3333. What is the original number searched for?**

Example: 9876-987-98-9 = 8782 > 3333

SOLUTION:

It must be higher than 3333 because this is the final nr.

As you can see in the example 9876 is way too high.

I tried 3999 // 3999-399-39-3 =3558

The searched four-digit number must be lower than 3999

It’s between 3999 and 3333

I tried 3799 // 3799-379-37-3=3380

The searched number is between 3799-3333

I tried 3750 // 3750-375-37-3=3335 (As you can see it’s almos 3333, the searched digit must be between 3740-3750)

I tried 3747 // 3747-374-37-3=3333

The searched number is 3747.

FINAL THOUGHTS

I compared my solution with the 13-year-old pupil’s solution after I found the number. I think it’s more logical, than mine. It’s traceable, meanwhile I only used some kind of weird logic and mathematics to get the answer… 😊 But it took me approximately 5 minutes, so I think it’s also effective.