

```

<script lang="ts">
import {Options, Vue} from "vue-class-component";

@Options({
  data() {
    return {
      inputNumber: "",
      memoizedFibonacci: new Map<number, number>(),
    };
  },
  computed: {
    fibonacci(): number | undefined {
      const n = parseInt(this.inputNumber);
      if (!Number.isNaN(n) && n ≥ 0) {
        if (this.memoizedFibonacci.has(n)) {
          return this.memoizedFibonacci.get(n);
        }
        let a = 0;
        let b = 1;
        for (let i = 0; i < n; i++) {
          const c = a + b;
          a = b;
          b = c;
        }
        this.memoizedFibonacci.set(n, a);
        return a;
      }
    },
  },
  methods: {
    onInput(): void {
      this.memoizedFibonacci.clear();
    },
  },
  components: {}
})
export default class Fibonacci extends Vue {}
</script>

```