

★ Chapter 11 — “Tiny BASIC”

(*Part Two: Hardware Hackers*)

This chapter explains how a simple programming language, **Tiny BASIC**, helped early personal computers become useful and fun — and how it represented the hacker spirit of **sharing, freedom, and community-built software**.

Before Tiny BASIC, early personal computers were just blinking boxes.

After Tiny BASIC, people could actually **write programs, play games, and create things**.

★ 1. The Problem Before Tiny BASIC

In the 1970s, home computers were still new.

Most of them came as:

- kits you had to build
- machines with no screen
- machines with no keyboard
- machines with NO useful software

Even if you had the hardware, you couldn't **do anything** without a programming language.

BASIC was the easiest programming language at that time.

But there were major problems:

- BASIC was huge
- BASIC needed lots of memory
- Early computers had very little memory
- Companies sold BASIC (not free)

So hobbyists needed a **tiny**, simple, free version of BASIC.

That's where **Tiny BASIC** comes in.

2. The Idea: A Small BASIC for Small Computers

Ted Nelson (author of *Computer Lib*) suggested creating a very small version of BASIC.
He wanted:

👉 A BASIC that is tiny, simple, and FREE for everyone.

Then came **Dr. John Kemeny** and **Tom Kurtz**, who originally created BASIC.
But hobbyists needed something even smaller.

That's when Dennis Allison, a teacher at Stanford, stepped in.

He designed the rules for something called:

👉 **Tiny BASIC — a compact version of BASIC for computers with almost no memory.**

He published these rules publicly so that hobbyists could build their own versions.

No copyright.

No company ownership.

Just open and free.

This was a huge moment for the hacker community.

3. The Community Builds It Together

Something magical happened:

- hobbyists
- students

- engineers
- self-taught programmers

ALL started writing their own versions of Tiny BASIC.

They shared their code in newsletters like **Dr. Dobb's Journal**, which became a famous magazine in programming history.

The culture was:

👉 “Here is my code. Improve it. Share it. Let everyone use it.”

This was **open-source** before open-source existed.

People around the country collaborated without meeting in person — only through printed letters, articles, and code listings.

This brought the hacker community even closer.



4. Why Tiny BASIC Mattered

Tiny BASIC made personal computers **usable**.

People could now:

- write small programs
- run games
- test hardware
- learn programming
- build tools
- explore ideas

Before Tiny BASIC = Computers were toys.

After Tiny BASIC = Computers became creative machines.

It turned lonely hardware into something people could **interact with**.

🎯 5. The Big Battle: Free Software vs. Paid Software

Tiny BASIC also started a debate:

Should software be **free**, or should companies sell it?

Many hackers believed:

👉 Software should be shared freely so everyone can learn.

But some companies wanted to charge money for it.

This debate eventually led to:

- open-source movement
- GNU project
- free software activism
- battles with companies like Microsoft

Tiny BASIC was the first big moment where hobbyists proved that:

👉 Community-created software can beat commercial software.

🔥 6. The Spirit of Tiny BASIC

This chapter celebrates the hacker values:

- **freedom**
- **sharing**

- **learning by doing**
- **community collaboration**
- **openness**
- **creativity**

Tiny BASIC wasn't just a programming language.

It was a **symbol**:

👉 “We can build this ourselves.
We don't need big companies.”

It showed ordinary people that they could write software — even for tiny, underpowered machines.

This mindset helped start the personal computer revolution.



Core Essence in One Sentence

Chapter 11 shows how Tiny BASIC — a small, free version of BASIC — turned early home computers into creative tools and united the hacker community through sharing, openness, and the DIY spirit.