So why are we still using unsafe programming languages?

If other programming languages are "memory safe", why are we not using them instead?

➡ Because C and assembly code are used when a program requires high performances (audio, vide, calculus …) or when dealing with hardware directly (OS, drivers ….)

Can we write better programs with unsafe programming languages?

Defensive Programming Approach

1. Adopting good programming practices
2. Being security aware programmer

Proactive Approach

3. Using security libraries
4. Performing penetration testing

Formal Approach

5. Using formal methods to <u>verify</u> a program
6. Using formal methods to <u>generate</u> a program