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#!/usr/bin/env python3
```

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"""
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```
utility_tools.py
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```
A collection of small, reusable Python utilities:
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- safe_read: read files safely with encoding fallback
- chunked: generator to split iterable into chunks
- timer: simple context-manager timer
- simple_http_get: perform an HTTP GET using urllib
- quicksort: example implementation
- fibonacci: iterative generator
- Example usage under __main__

```
"""
```

```
from __future__ import annotations
import argparse
import sys
import time
from contextlib import contextmanager
from typing import Iterable, Iterator, List, TypeVar, Generator
import urllib.request
import urllib.error
```

```
T = TypeVar("T")
```

```
def safe_read(path: str, encodings: Iterable[str] = ("utf-8", "latin-1")) -> str:
```

```
    """Read a text file trying multiple encodings and return its contents."""
```

```
    last_exc = None
```

```
    for enc in encodings:
```

```
        try:
```

```
            with open(path, "r", encoding=enc) as f:
```

```
                return f.read()
```

```
            except Exception as e:
```

```
                last_exc = e
```

```
    raise last_exc
```

```
def chunked(iterable: Iterable[T], n: int) -> Iterator[List[T]]:
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```
    """Yield successive n-sized chunks from iterable."""
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```
    if n <= 0:
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```
        raise ValueError("n must be > 0")
```

```
    buf: List[T] = []
```

```
    for item in iterable:
```

```
        buf.append(item)
```

```
        if len(buf) >= n:
```

```
            yield buf
```

```
            buf = []
```

```
    if buf:
```

```
        yield buf
```

```
@contextmanager
```

```
def timer(name: str = "block"):
```

```
    """Context manager that prints elapsed time to stderr."""
```

```
    start = time.perf_counter()
```

```
    try:
```

```
        yield
```

```
    finally:
```

```
        end = time.perf_counter()
```

```
        print(f"[TIMER] {name}: {end - start:.6f}s", file=sys.stderr)
```

```
def simple_http_get(url: str, timeout: float = 10.0) -> str:
```

```
    """Perform a simple HTTP GET and return response text (utf-8)."""
```

```
    req = urllib.request.Request(url, headers={"User-Agent": "utility-tools/1.0"})
```

```
    with urllib.request.urlopen(req, timeout=timeout) as resp:
```

```
        raw = resp.read()
```

```
        try:
```

```
            return raw.decode("utf-8")
```

```
        except Exception:
```

```
            return raw.decode("latin-1", errors="replace")
```

```
def quicksort(a: List[T]) -> List[T]:
```

```

    """Simple quicksort (not in-place) for demonstration."""
    if len(a) <= 1:
        return a[:]
    pivot = a[len(a) // 2]
    left = [x for x in a if x < pivot]
    middle = [x for x in a if x == pivot]
    right = [x for x in a if x > pivot]
    return quicksort(left) + middle + quicksort(right)

def fibonacci(n: int) -> Generator[int, None, None]:
    """Yield first n Fibonacci numbers (0-based)."""
    a, b = 0, 1
    for _ in range(n):
        yield a
        a, b = b, a + b

def parse_args(argv=None):
    p = argparse.ArgumentParser(description="Utility tools demo")
    p.add_argument("--fib", type=int, help="print first N Fibonacci numbers")
    p.add_argument("--fetch", type=str, help="perform a simple HTTP GET and print length")
    p.add_argument("--file", type=str, help="print the first 400 characters of a file")
    p.add_argument("--sort", nargs="+", help="sort the provided list of numbers", default=[])
    return p.parse_args(argv)

def main(argv=None):
    args = parse_args(argv)
    if args.fib is not None:
        print(", ".join(str(x) for x in fibonacci(args.fib)))
    if args.fetch:
        with timer("fetch"):
            body = simple_http_get(args.fetch)
            print(f"Fetched {len(body)} bytes from {args.fetch}")
    if args.file:
        try:
            text = safe_read(args.file)
            print(text[:400])
        except Exception as e:
            print("Error reading file:", e, file=sys.stderr)
    if args.sort:
        try:
            nums = [float(x) for x in args.sort]
            sorted_nums = quicksort(nums)
            print(" ".join(str(x) for x in sorted_nums))
        except Exception as e:
            print("Error sorting inputs:", e, file=sys.stderr)

if __name__ == "__main__":
    main()

```