

640 KB ought
to be enough
for anybody.

- BILL GATES,
CIRCA 1981

ANY FOOL CAN WRITE CODE
THAT A COMPUTER CAN
UNDERSTAND. GOOD
PROGRAMMERS WRITE
CODE THAT HUMANS CAN
UNDERSTAND.

– MARTIN FOWLER
FROM REFACTORING: IMPROVING
THE DESIGN OF EXISTING CODE

COMPUTER SCIENCE IS
NO MORE ABOUT
COMPUTERS THAN
ASTRONOMY IS ABOUT
TELESCOPES.

- EDGER W. DIJKSTRA

DEBUGGING IS
ANTICIPATED WITH
DISTASTE, PERFORMED
WITH RELUCTANCE, AND
BRAGGED ABOUT
FOREVER.

- ANONYMOUS

DOCUMENT MY
CODE? WHY DO
YOU THINK THEY
CALL IT CODE?

DON'T USE THE
COMPUTER TO DO
THINGS THAT CAN
BE DONE
EFFICIENTLY BY
HAND.

EVERYTHING
THAT CAN BE
INVENTED HAS
BEEN INVENTED.

– CHARLES H. DUELL,
COMMISSIONER, U.S. OFFICE OF
PATENTS, 1899

GET YOUR DATA
STRUCTURES
CORRECT FIRST AND
THE REST OF THE
PROGRAM WILL
WRITE ITSELF.

GOOD JUDGMENT
COMES FROM
EXPERIENCE, AND
EXPERIENCE COMES
FROM BAD
JUDGMENT.

THE BEST TASKS ARE
THOSE THAT STUDENTS
FIND A LITTLE TOO
DIFFICULT TO
COMPLETE
COMFORTABLY.

– UNKNOWN

GOOD PROGRAMMERS
KNOW WHAT TO WRITE.
GREAT ONES KNOW
WHAT TO REWRITE
(AND REUSE).

- ERIC S. RAYMOND,
UNOFFICIAL SPOKESPERSON FOR
THE OPEN SOURCE MOVEMENT

THE ABILITY TO CODE
IS THE CLOSEST
THING WE HAVE TO A
SUPERPOWER.

- DREW HOUSTON,
FOUNDER OF DROPBOX

YOU DON'T HAVE TO
BE A GENIUS TO
CODE. DO YOU HAVE
TO BE A GENIUS TO
READ?

- BRONWEN GRIMES

HALF OF
PROGRAMMING IS
CODING. THE
OTHER 90% IS
DEBUGGING.

HARDWARE IS THE PART
OF A COMPUTER SYSTEM
THAT CAN BE KICKED AND
SOFTWARE IS THE PART
THAT CAN ONLY BE
SCREAMED AT.

- UNKNOWN

HE WHO LAUGHS
LAST PROBABLY
MADE A BACK-
UP.

- UNKNOWN

I FIND THAT THE
HARDER I WORK,
THE MORE LUCK I
SEEM TO HAVE.

- THOMAS JEFFERSON

IF AT FIRST YOU
DON'T SUCCEED,
CALL IT VERSION
1.0.

IF GM HAD KEPT UP WITH
TECHNOLOGY LIKE THE
COMPUTER INDUSTRY HAS,
WE WOULD ALL BE DRIVING
\$25 CARS THAT GOT
1000 MPG.

- BILL GATES

IF YOU GIVE SOMEONE A
PROGRAM, YOU WILL
FRUSTRATE THEM FOR A
DAY; IF YOU TEACH THEM HOW
TO PROGRAM, YOU WILL
FRUSTRATE THEM FOR A
LIFETIME.

– UNKNOWN

IF YOU HAVE TOO
MANY SPECIAL
CASES, YOU ARE
DOING IT WRONG.

INSIDE EVERY LARGE
PROGRAM IS A
SMALL PROGRAM
STRUGGLING TO GET
OUT.

IT IS A MISTAKE TO
LET ANY ELECTRO-
MECHANICAL DEVICE
REALIZE THAT YOU
ARE IN A HURRY.

IT'S HARD ENOUGH TO FIND
AN ERROR IN YOUR CODE
WHEN YOU'RE LOOKING FOR
IT; IT'S EVEN HARDER WHEN
YOU'VE ASSUMED YOUR CODE
IS ERROR-FREE.

- STEVE MCCONNELL

IT'S OKAY TO GIVE
ADVICE TO A FELLOW
STUDENT IN
ENGLISH, BUT NOT
IN JAVA.

KEYBOARD (N):
INSTRUMENT USED
TO ENTER LETTERS
INTO A COMPUTER.

LAZINESS IS AN ESSENTIAL
QUALITY IN A COMPUTER
SCIENTIST. WHY ELSE WOULD
WE WORK SO HARD TO
FIND AN EASY WAY TO DO
THINGS?

- KATRIN BECKETZ
THE BECKETZ BLOG

ANYONE WHO HAS
NEVER MADE A
MISTAKE HAS NEVER
TRIED ANYTHING
NEW.

- ALBERT EINSTEIN

MULTIPLYING BY
0.1 IS NOT THE
SAME AS
DIVIDING BY 10.

FAILURE IS AN OPTION
HERE. IF THINGS ARE
NOT FAILING, YOU ARE
NOT INNOVATING
ENOUGH.

- ELON MUSK

SOFTWARE ISN'T
RELEASED, IT'S
ALLOWED TO
ESCAPE.

- UNKNOWN

TESTING CAN SHOW
THE PRESENCE OF
BUGS, BUT NOT
THEIR ABSENCE.

TO UNDERSTAND
RECURSION, YOU
MUST FIRST
UNDERSTAND
RECURSION.

THE BEST WAY TO
PREDICT THE
FUTURE IS TO
INVENT IT.

- ALAN KAY

THE CHEAPEST, FASTEST,
AND MOST RELIABLE
COMPONENTS OF A
COMPUTER SYSTEM ARE
THOSE THAT AREN'T
THERE.

THE FASTEST ALGORITHM
CAN FREQUENTLY BE
REPLACED BY ONE THAT
IS ALMOST AS FAST AND
MUCH EASIER TO
UNDERSTAND.

THE FIRST STEP IN
FIXING A BROKEN
PROGRAM IS
GETTING IT TO FAIL
REPEATEDLY.

THE ONLY WAY TO
LEARN A NEW
PROGRAMMING
LANGUAGE IS BY
WRITING PROGRAMS
IN IT.

- BRIAN KERNIGHAN &
DENNIS RITCHIE

THE SOONER YOU
START TO CODE,
THE LONGER THE
PROGRAM WILL
TAKE.

-ROY CARLSON

THERE ARE 10 TYPES
OF PEOPLE IN THE
WORLD, THOSE WHO
UNDERSTAND BINARY
AND THOSE WHO DON'T.

IF ALL OUR TECHNOLOGY IS
CREATED BY THE SAME PEOPLE,
THEN OUR SOLUTIONS WILL BE
LIMITED AND THEY WILL SERVE
ONLY THOSE PEOPLE. DIVERSE
BACKGROUNDS YIELD DIVERSE
MINDS WHICH YIELD DIVERSE
SOLUTIONS.

- JUAN GILBERT

THERE ARE TWO WAYS
TO WRITE ERROR-
FREE PROGRAMS,
BUT ONLY THE THIRD
ONE WORKS.

- ALAN J. PERLIS

THERE IS NO REASON
ANYONE WOULD WANT
A COMPUTER IN
THEIR HOME.

— KEN OLSEN,
FOUNDER AND PRESIDENT,
DIGITAL EQUIPMENT
CORPORATION, 1977

THERE'S
ALWAYS ONE
MORE BUG.

– LUBATSHKY'S LAW OF
CYBERNETIC ENTOMOLOGY

TO ETZL IS HUMAN,
BUT TO REALLY
FOUL THINGS UP YOU
NEED A COMPUTER.

- PAUL ETZLICH

YOU CAN HELP YOUR
NEIGHBORS WITH
YOUR MOUTH, BUT
HANDS OFF THEIR
MOUTH!

WEEKS OF
PROGRAMMING
CAN SAVE YOU
HOURS OF
PLANNING.

— ANONYMOUS

WHEN SOMEONE
THROWS A \$100
BILL AT YOU,
DON'T DUCK

- MARIE ROBINSON

WHY DO
PROGRAMMERS
CONFUSE HALLOWEEN
AND CHRISTMAS?

31 OCT = 25 DEC

USER, N. THE WORD
COMPUTER
PROFESSIONALS USE
WHEN THEY MEAN
"IDIOT."

- DAVE BARRY

PROGRAMS MUST BE
WRITTEN FOR PEOPLE
TO READ, AND ONLY
INCIDENTALLY FOR
MACHINES TO EXECUTE.

- HAL ABELSON &
GERALD JAY SUSSMAN

TAKE ALL THE COURSES IN
YOUR CURRICULUM. DO THE
RESEARCH. ASK QUESTIONS.
FIND SOMEONE DOING WHAT
YOU ARE INTERESTED IN!
BE CURIOUS!

— KATHERINE JOHNSON

ART IS NEVER
FINISHED, ONLY
ABANDONED.

– LEONARDO DA VINCI,
ANTICIPATING SOFTWARE
BY FOUR CENTURIES (?)

RULES FOR
OPTIMIZATION:
1. DON'T DO IT.
2. (FOR EXPERTS
ONLY) DON'T DO IT
YET.

- MICHAEL A. JACKSON

THE DIFFERENCE
BETWEEN THEORY AND
PRACTICE IS SMALLER
IN THEORY THAN IN
PRACTICE.

- ANONYMOUS

AS SOON AS YOU AGREE
ON THE NUMBER OF
SPACES FOR
INDENTATION, NO-ONE
ARGUES FOR TABS.

- ALVAR LUMBERG

...THE GREAT DOESN'T
HAPPEN THROUGH
IMPULSE ALONE, AND IS A
SUCCESSION OF LITTLE
THINGS THAT ARE
BROUGHT TOGETHER.

- VINCENT VAN GOGH

WHEN DEBUGGING,
NOVICES INSERT
CORRECTIVE CODE;
EXPERTS REMOVE
DEFECTIVE CODE.

- RICHARD PATTIS

DO NOT USE THE IDIOM:

```
if (something) {  
    return true;  
} else {  
    return false;  
}
```

(IT IS THE SAME AS
return something;)

MULTI-THREADING IS
THE ART OF SCREWING
THINGS UP BEFORE,
DURING, OR AFTER
SOMETHING ELSE.

- ANONYMOUS

SOME PEOPLE, WHEN
CONFRONTED WITH A
PROBLEM, THINK "I KNOW,
I'LL USE REGULAR
EXPRESSIONS." NOW THEY
HAVE TWO PROBLEMS.

- JAMIE ZAWINSKI

IN CASE OF FIRE:

```
$ git commit -a
```

```
$ git push
```

EXIT THE BUILDING.

- THANKS TO RIA GALANOS

