Flashback to your first year...

Write a Java function that takes
as input an array of numbers and
returns as output the largest number
that is adjacent to a zero.

... look at code ...

Is solving a problem that is this small "software engineering"?

analysis
design
implementation
testing
deployment
maintenance

analysis
design
implementation
testing
deployment
maintenance

```
while (true)
{
    > emacs LargestNeighbor.java
    > javac LargestNeighbor.java
    > java LargestNeighbor
}
```

analysis
design
implementation
testing
deployment
maintenance

analysis
design
implementation
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deployment
maintenance

What questions should you ask your "client" about LargestNeighbor?

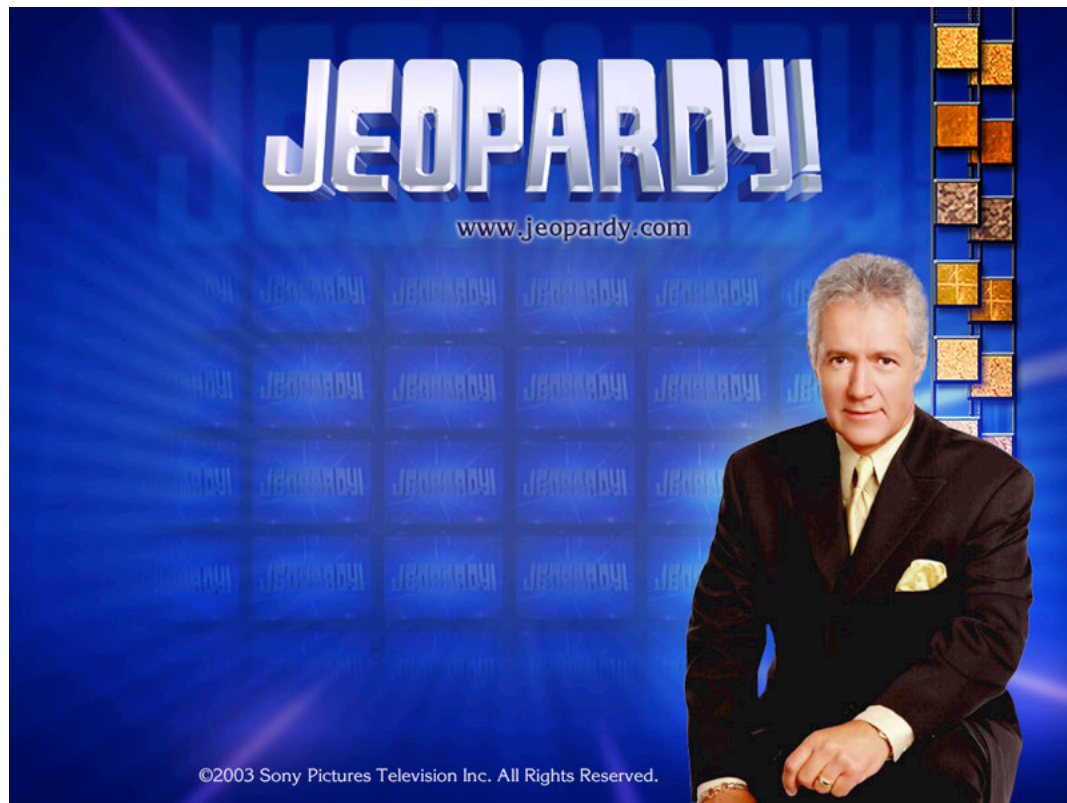Is an array of length 0 allowed?
If so, what is the correct answer?

Must the array have at least one 0 value?

Must the array have at least one non-0 value?

If not, what is the correct answer?

Are negative values allowed?

If negative values are allowed,
should we use absolute values?

Should `LargestNeighbor` be
an instance method or `static` method?

Let's play...

Yes.

Do I really need to know how to do stuff like this?

Version Control

What one skill that students don't tend to learn in school has the most effect in the world of software engineering?
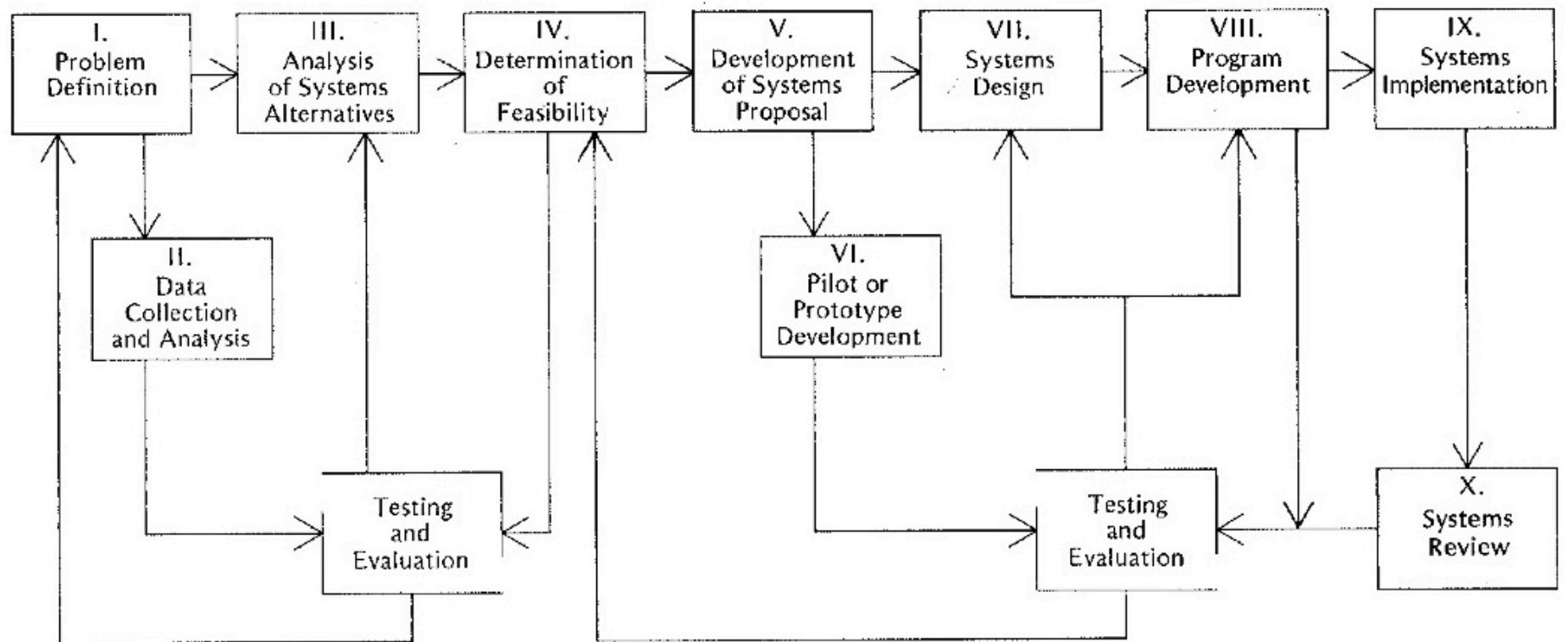
Figure 1-1 Overview of the systems development life cycle

problem definition

data collection and analysis

analysis of
systems alternatives

determination
of feasibility

development
of system proposal

development
of pilot system

systems design

systems development

systems deployment

systems review
and evaluation