Programming and Scripting:

- Ruby
- PHP
- JavaScript
- Perl
- Shell
- APL
- AppleScript
- Tcl/Tk
- MATLAB
- R
- AutoIt
- AMPscript
- ActionScript
- COBOL
- Fortran 77
- Fortran 95
- HPF
- BASIC
- ADA 2005
- Delphi
- Eiffel
- CUDA C/C++: describe Nvidia’s language for GPU programming.
- Cilk
- UPC (unified parallel C)
• Objective-C
• Go
• SQL
• Visual Basic
• D
• Scala
• Erlang
• Clojure
• ML
• Haskell
• Groovy
• Julia
• Lua
• Dart
• Swift
• Forth
• Hack
• Rust
• Io
• Factor
• Vala
• Other: name a programming language that is interesting to you.

**Tools and Specification Languages:**

• Lint: describe the lint tool to find problems in C code. Also discuss its relative splint for finding security vulnerabilities.
• Doxygen

• Make: describe the make utility and its specification language that defines the project build dependences and commands. For this topic a focus on advanced features is preferred.

• SWIG: describe the SWIG specification language and tool.

• XML and XML Schema: describe the XML markup language format and the role of XML Schema to define valid XML (XML Schema, like a class definition, specifies structure while XML instances, like objects, contain valid data).

• XSLT: describe the XSLT (Extensible Stylesheet Language Transformations) declarative XML transformation language.

• XQuery: describe the XQuery XML query language.

• RDF: describe the Resource Description Format in XML. RDF is a metadata data model. RDF is a general method for conceptual description or modeling of information that is implemented in web resources, e.g. using XML.

• VHDL: describe the VHDL hardware description language. Is VHDL also suitable as a programming language or only as a hardware design language? Why not use C to describe hardware?

• Verilog: describe hardware description language Verilog.

• TeX/LaTeX: describe the TeX/LaTeX document markup language. The LaTeX programming language has markup syntax and programming constructs such as if and TeX operates by macro expansion that resembles function invocation.

• SAS: describe the SAS system and its 4th generation programming language.

• LePUS3: describe the object-oriented, visual design description language LePUS3 for software modeling and formal specification.

• Other: name a programming related tool or language that is interesting to you.