

Language Questions Submitted by Presenting Groups

You cannot discuss these questions with anyone!

Perl Programming Language: Adams/Lewis

Perl is an interpreted language but it is faster than other scripting languages. Why?
Perl is a loosely type language. Explain why.

Haskell Programming Language: Richardson/Yu

Name two advantages of lazy evaluation in Haskell.
What does it mean when we say that Haskell treats functions as first-class values?

Python Programming Language: Bjorklund/Melkote

Python code is automatically compiled into bytecodes when the program is executed.
What are some advantages and disadvantages of this approach compared to Java, which makes compilation a separate, explicit step?

Python allows multiple assignments in a single statement. This could be implemented in one of two ways – the RHS values could be evaluated one at a time and assigned to the corresponding LHS value, or all of the RHS values could be evaluated before any of the assignments are made. Explain which of these two choices is preferable in terms of side-effects or other undesirable results and give an example that illustrates your answer.

Concurrency in Java: Khosla/Perugini

How can two or more executing threads cause a problem? Why do you need monitors?

Does concurrency have to be handled through threads? If so, why, and if not, what other method could you use and how would [you] decide when to use which?

Delphi: Bhusnan/Watkins

Name two advantages of multi-tier systems?

Name one major objective of DELPHI that custom components facilitate?