Amanda Lewis

Programming Languages

Dr. Gupta

September 7, 2018

Homework #1

1. The first programming language I learned was python in Concepts I. I did not choose it, but I think that python is the first language they teach at St. Edward’s because it is generally human-readable and has only a few strict rules. For example, java has many more rules about syntax, method declarations and semicolons, but python does not have all that.
2. Question 2
   1. String 4message = “Variable names cannot begin with a number!”;
   2. Strnig message = “’String’ is misspelled!”;
   3. char ch = “a”;
   4. Dynamic semantic error:
      1. Int x = 8;
      2. Int y = 0;
      3. Int z = x/y;
      4. Print(z)
   5. Having a memory leak or unused variables.
3. C and C++ are generally faster as they operate closer to the memory level, while languages like Java take slightly longer to run, but also have the added benefit of a stack trace error that will show you what kind of error you got, and where it came from, while with a language like C, it will write a value to a memory address or maybe seg-fault on you.
4. Discard
5. In C, you have more control over memory, and it has more extensibility and more features, so it’s easy to update the security.