

4. (100 points) Answer the following questions about language terminology:

- a. When we write a program in a language like Java, what tool helps translate from code humans better understand to code the computer better understands?
- b. Because of a tool like this being used, what type of programming language does this make Java?

a) The compiler translates from English to machine language/code

b) This makes java a high level code

3. (100 points) Imagine this neighborhood directory:

Nemo - 42 Wallaby Way

Harry - 4 Privet Drive

Garfield - 711 Maple Street

Spongebob - 124 Conch Street

Xavier - 1407 Graymalkin Lane

You are a neighborhood manager who fields requests about the current residents. Answer the following questions about this role.

- If you are asked about 124 Conch Street, what do you report?
- If Dudley moves into 4 Privet Drive and Harry moves out, what do you report when asked about this location?
- What do you report when asked about 31 Spooner Street?
- What are the addresses in this neighborhood directory representing about how programs work? What are the names at each address? And what is your role as the neighborhood manager?

a) Spongebob lives at 124 Conch St.

b) Dudley lives at 4 Privet Drive

c) 31 Spooner St doesn't exist in the neighborhood directory

d) The addresses are variables with a string value associated with them. The names are the string value within the variable. To retrieve the value within the variable