Ryan Draper

CS 326

Reading • Ch. 9 & 16: Section 9.6 – 9.12, 16.1 – 16.6.5

1. What good is a closure other than to be confusing, troublesome, and hard to logically interpret? Were some of these uses say in C++ such as coroutines and closures all intentional in the designing of the language?

2.Chapter 9 has been the most eye opening in truly telling me how little I know not only about languages but more specifically C++ in the capabilities with functions and pointers especially 9.8, 12, 13.

3.

int f(int a, int b)

{

return a - b;

}

int g(int c, int d)

{

return c + d;

}

int higherOrder(int \* b, int d, int e))

{

return \*b(d,e);

}

int main(){

cout << higherOrder(f(1,2));

cout << higherOrder(g(1,2));

}

4. A closure allows a function to access variables outside its own scope that are local or globals. The closure would be referenced through the environment that called it and would be allowed as long as referenced correctly through nested subprograms. As in the example there the ‘y’ variable is referenced from an earlier call and is finished when it called again in the end with the return x + y.