

Self Exercise for Week 6

Due April 8th at 3:00 p.m.

- A. Use g++ to compile the following program, and then use nm to list symbols of the executable file. What encoded identifiers are used for the functions?

```
1  double average(double * n1, double & n2)
2  {
3      return ((*n1 + n2) / 2.0);
4  }
5  int average(int n1, float n2)
6  {
7      return ((n1 + n2) / 2);
8  }
9  int main()
10 {
11     return 0;
12 }
```

- B. What is the output of the following program? Why?

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     char a, *pa;
6     int b, *pb;
7     float c, *pc;
8     double d, *pd;
9
10    cout << sizeof(a) << " " << sizeof(pa) << endl;
11    cout << sizeof(b) << " " << sizeof(pb) << endl;
12    cout << sizeof(c) << " " << sizeof(pc) << endl;
13    cout << sizeof(d) << " " << sizeof(pd) << endl;
14    return 0;
15 }
```

Deliverables

Simply a *README* file showing your answers for the two questions.