HW 6

1. Primitive datatypes are datatypes that are defined as a basic part of the C++ Language.
2. No. Structure declaration doesn’t define a variable.
3. Arrays that can hold a single datatype, while structures can hold multiple datatypes as members.
4. 1. Point center;
   2. center.x = 12;
   3. center.y = 7;
   4. cout << “Center: (” << center.x << “, ” << center.y << “)”;
5. 1. FullName info;
   2. info.lastName = Feng; info.firstName = Yu;
   3. cout << info.firstName << “ “ << info.middleName << “ “ << info.lastName;
6. cout << inventory[49].partName;
7. 1. Canton
   2. Haywood
   3. 9478
   4. 0
8. 1. r= new Rectangle
   2. r->length = 10; r -> width = 14;
9. Structure stores all the members separately in a consecutive memory, while union stores all its member in the same memory region over each other, only one member can be used in union each time.
10. It uses 8 bytes.
11. It displays 0 1 2
12. 1. Valid
    2. Invalid
    3. Valid
    4. Invalid
    5. Valid
    6. Valid
    7. Valid
13. Before a structure variable can be created, the structure must be declared.
14. The tag is the name of the structure type.
15. The variables declared inside a structure declaration are called members.
16. A semicolon is required after the closing brace of a structure declaration.
17. In the definition of a structure variable, the tag is placed before the variable

name, just like the data type of a regular variable is placed before its name.

1. The dot operator allows you to access structure members.
2. T
3. T
4. F
5. F
6. T
7. F
8. F
9. T
10. F
11. T
12. F
13. T
14. T
15. F
16. F
17. F
18. F
19. T
20. F
21. T
22. T