

1. What is the value of the variable x after executing the code below?

```
int y = 3;
int x = 3;

do
{
    x += y;
} while (y-- > 1);

return x;    // What is x?
```

2. What is the value of the variable x after executing the code below?

```
bool x;
int a = 6;
int b = 3;

a = ++a;
b = b & 1;

x = (a == b);

return x;    // What is x?
```

3. What is the value of the variable x after executing the code below?

```
static string dwarf()
{
    int happy;
    var hi = true;
    string[] dwarf =
        {"0:>", ":{", "x)", ":", "|<", ":|", ":/"};

    for (happy = 0; happy < dwarf.Length; happy++)
    {
        bool ho = !(hi);
        hi = ho;
    }

    var x = dwarf[happy/2] == ":" ? "hi!" : "ho!";
    return x;
}
```

4. A value type that is typically used to encapsulate small groups of related variables, such as the coordinates of a rectangle or the characteristics of an item in an inventory
5. Used to return or assign a value in a property
6. passes control to the next iteration of the enclosing while, do, for, or foreach statement in which it appears
7. ability of objects of different types to provide a unique interface for different implementations of methods.
8. an object's ability to hide data and behavior that are not necessary to its user
9. contains the collection of instructions that are executed at the time of Object creation
10. method of the class which gets automatically invoked whenever an instance of the class is created
11. grouping together variables of other types, methods and events to create custom types
12. comprised of a member access modifier, a return type, a method name, parameter list (if no parameters needed for the method then this may be left empty)
13. the least permissive access modifier, members are accessible only within the body of the class or the struct in which they are declared
14. signals the occurrence of an exception during program execution