

## ASSIGNMENT-6

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1.What is private access specifier?

Private access specifier allows a class to hide its member variable and member functions from other functions and objects.Only function of the same class can access its private members. Even an instance of a class cannot access its private members.

2.what are the getter and setter method?

The getter and setter are the two conventional methods that are used for retrieving and updating the value of a variable

- Getter method is a method that reads the value of a variable.it returns the value of attribute.
- Setter method is a method that updates the value of a variable.it takes a parameter and assigns it to the attribute.

3.why this keyword in the setter method?

We use this keyword when the variables names are same it is to distinguish between them.

This keyword is used to refer to the current object.

4.difference between local variables and member variable/instance variable.

Local variables	member variable/instance variable
<p>These variables are declared within a method but do not get any default value.</p> <ul style="list-style-type: none"><li>• They are usually created when we enter a method or constructor and are destroyed after exiting the block or when the call returns from the method.</li><li>• Its scope is generally limited to a method and its scope starts from the line they are declared.their scope usually remains there until the closing curly brace of the method comes.</li><li>• The initialization of the local variable is mandatory.</li></ul>	<p>These variable are declared within a class but outside a method,constructor,or block and always get a default value</p> <ul style="list-style-type: none"><li>• These variables are usually create when we create an object and are destroyed when the object is destroyed.</li><li>• We may use an access specifier,for instance ,variable, and if no access specifier is specified,then the default access specifier is used.</li><li>• Each and every object will have its own copy of instance variables.</li></ul>

5.what is reference variable?

Reference variables is a variable that are used to points to an object of a given classes,interfaces,arrays,enumeration and annotations are reference types in java.reference variables holds the objects/values of reference types in java.

6.syntax of creating an object?

```
ClassName object=new Classname();
```

7.explain in detail what happens when we create an object?

When we create an object ,memory is allocated to hold the object properties.when we create an object you are creating an instance of a class,therefore”instantiating “a class

8.what is a class?

A class is a template or a blueprint from which objects are created and also to define object data types and methods

9.what is an object?

Object is a member of a java class.Each object has an identity, a behaviour and a state.the state of an object is stored in variables while methods display the object behaviour.

10.what are the default values of all the data types?

Data type	Default values
Byte	0
Short	0
Int	0
Long	0L
Float	0.0f
Double	0.0d
Char	'\u0000'
String	Null
boolean	false

11.Difference between Static method and instance method?

Static method	Instance method
<ul style="list-style-type: none"><li>• Static method exist in a single copy for a class.</li><li>• Static methods can't access instance methods/variables directly.</li><li>• It doesn't require an object of the class</li><li>• It is the example of pass-by-reference programming</li></ul>	<ul style="list-style-type: none"><li>• Instance method exist as multiple copies depending on the number of instances created for the particular class</li><li>• Instance methods can access static variables and static methods directly.</li><li>• It requires an object of the class.</li><li>• It is the Example of pass-by-value programming</li></ul>

12.Syntax for accessing the member variable in the main?

Object.variablename;

13.Syntax for instance method defination

Access\_specifier return\_type method\_name()

{

Method body;

}

- Access\_specifier:it is a scop of method which allows who can access this method.
- Return type: method a value like int,void,String etc.
- Method\_name:you can write anything as you write the variable name.
- Method body:it describes what the method does with statements.

#### 14. Syntax of static method definition?

```
Access_modifier static void methodName()  
{  
    //Method body  
}
```

- Access\_modifier: it allows us to set the scope or accessibility or visibility of a data member be it a field, constructor, class or method.
- Static: it is a keyword which allows to help the main method to run without creating any object.
- Void: it's a keyword which specifies that a method should not have a return value.
- MethodName: it should follow the naming conventions.

#### 15. Difference between actual parameter and formal parameter?

Actual parameters are those parameters that are specified in the calling function. while on the other hand, formal parameters are those parameters that are declared in the called function.

#### 16. why we need the parameter or arguments to the methods.

Arguments are the actual values that are passed in when the method is invoked. when you invoke a method the arguments used must match the declaration parameters in type and order.

Parameters are essential to functions, because otherwise you can't give the function machine an input.

#### 17. why we need the return statement and return type to the method?

Return statements end the execution of a function, and return control to the calling function. it can return the value to the calling function.

A every method in java declared with a return type and it is mandatory for all java methods. a return type may be a primitive type like int, float, double, a reference type or void type (returns nothing).

#### 18. method can be private?

Yes we can have private methods or private static methods in an interface in java9

An object user can use the public methods, but can't directly access private instance variable. you can make methods private too.

#### 19. what is the error message if we access private variable or method outside the class?

The field class variable is not visible