

**JAVA** 

Class 25

## Agenda

Final Keyword

### Task

```
class Parent {
    m1(){}
         System.out.println("In parent class m1");
class Subclass extends Parent{
    m1(){}
         System.out.println("In child class m1");
    m2(){}
         System.out.println("In m2");
public static void main(String args[]){
    Parent obj= new Subclass();
    obj.m1();
    obj.m2();
```

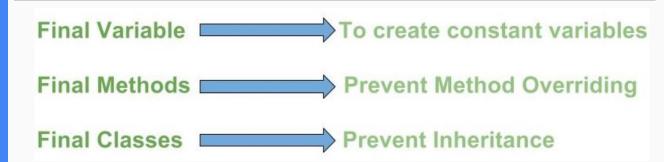
#### **Task**

Create a Class Computer that will have 4 subclasses as Apple, Lenovo, HP, Dell.

- Define common behavior within and some fields in parent class and override some of the methods in child classes
- Define some methods specific to child classes
- Create objects of child classes and store them into array. Loop through each object and execute available methods.

# Final keyword

- A final keyword in java can be used with a class, with a variable and with a method.
- final keyword restricts the further modification.
- When we use final keyword with an entity (class or variable or method), it gets the meaning that entity is complete and can not be modified further.
- final is a non access modifier



#### **Final Class**

We can't create a subclass to the final class or we can't extend a class or we can't modify a class which is declared as final.

```
final class FinalClass {
   //some statements
}

class SubClass extends FinalClass {
   //compile time error
   //Can't create sub class to the final class
}
```

### Final method

We can't override a method or we can't modify a method in the sub class which is declared as final in the super class.

```
class SuperClass {
  final void methodOne() {
    //some statements
class SubClass extends SuperClass {
  @Override
  void methodOne() {
    //Compile time error
    //can not override final method
```

### Final variable

The value of a final variable can not be changed once it got initialized.

```
class AnyClass {
  final int i = 10;

  void methodOne() {
    i = 20; //compile time error
    //final field cannot be re-assigned
  }
}
```