Static Binding and Dynamic Binding



Connecting a method call to the method body is known as binding.

There are two types of binding

1. static binding (also known as early binding).
2. dynamic binding (also known as late binding).

static binding

When type of the object is determined at compiled time(by the compiler), it is known as static binding.

If there is any private, final or static method in a class, there is static binding.

Example of static binding

1. **class** Dog{
2. **private** **void** eat(){System.out.println("dog is eating...");}
4. **public** **static** **void** main(String args[]){
5. Dog d1=**new** Dog();
6. d1.eat();
7. }
8. }

Dynamic binding

When type of the object is determined at run-time, it is known as dynamic binding.

Example of dynamic binding

1. **class** Animal{
2. **void** eat(){System.out.println("animal is eating...");}
3. }
5. **class** Dog **extends** Animal{
6. **void** eat(){System.out.println("dog is eating...");}
8. **public** **static** **void** main(String args[]){
9. Animal a=**new** Dog();
10. a.eat();
11. }
12. }

Output:dog is eating...

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| In the above example object type cannot be determined by the compiler, because the instance of Dog is also an instance of Animal.So compiler doesn't know its type, only its base type. |