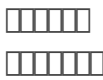




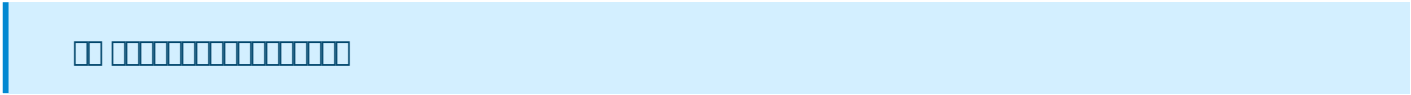
Web

- Java
  - Java - final
  - JDA Discord Forum Channel Thread
  - Java - Type Casting
- Spring (Spring Boot)
  - Spring

# Java



# Java 面试题 - final 关键字



final 在 Java 中有什么作用？ Code 是什么？

final 修饰 class 有什么作用？

final 修饰 class 有什么作用？

final 修饰 class 有什么作用？ Compile error



final 修饰 class 有什么作用？ Override

final 修饰 class 有什么作用？ Compile error



final 修饰 class 有什么作用？ Compile error

final 修饰 class 有什么作用？ final



- final 修饰 class 有什么作用？ abstract 修饰 class 有什么作用？
- final 修饰 class 有什么作用？ Reflection API 有什么作用？ final 修饰 class 有什么作用？



Java

# JDA ❷ Discord Forum Channel ❷ Thread ❷

## Code ❷

```
public class Main extends ListenerAdapter {

    public static final String TOKEN = "<BOT_TOKEN_HERE>";
    public static final String SERVER_ID = "<SERVER_ID_HERE>";
    public static final String PROJECT_FORUM_ID = "<FORUM_ID_HERE>";

    public static void main(String[] args) throws InterruptedException {
        JDA jda = JDABuilder.createDefault(Main.TOKEN).build();

        jda.addEventListener(new Main());
    }

    @Override
    public void onReady(ReadyEvent event) {
        System.out.println("Bot is ready");
        JDA jda = event.getJDA();

        Guild server = jda.getGuildById(SERVER_ID);
        assert server != null;
        ForumChannel channel = server.getForumChannelById(PROJECT_FORUM_ID);
        assert channel != null;
        System.out.printf("Channel name: %s%n", channel.getName());
        List<ThreadChannel> threadChannels = channel.getThreadChannels();

        for(ThreadChannel thread : threadChannels){
            System.out.printf("Thread: %s%n", thread.getName());
        }
    }
}
```

```

    }

    //  Bot
    //  jda.shutdown();

    }

}

```



- JDA Guild (Discord Server) Guild ForumChannel
- `getThreadChannels()` ThreadChannel List
- List for



- **TOKEN** **Channel ID** **(Hardcode)**
- JDA (JDA.shutdown()) Gradle

Casting ☐ ☐ ☐ ☐

```

class Animal {
    void speak(){
        System.out.println("Default speak");
    }
}

class Bird extends Animal {
    @Override
    void speak() {
        System.out.println("Bird ");
    }
}

class Dog extends Animal {
    @Override
    void speak() {
        System.out.println("Dog ");
    }
}

public class main {
    public static void main(String[] args) {
        Animal animal = new Animal();
        Bird bird = new Bird();
        Dog dog = new Dog();

        animal.speak();
        bird.speak();
        dog.speak();
    }
}

```

```
// Upcasting and Downcasting
```

```
Animal animal2;
```

```
animal2 = bird; // Upcasting
```

```
animal2.speak(); // works normally
```

```
Bird bird2;
```

```
// bird2 = animal; // Down casing, compile error
```

```
// bird2 = (Bird)animal; // Compile pass
```

```
// bird2.speak(); // but throw ClassCastException error
```

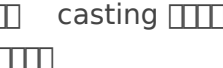


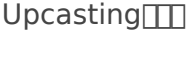
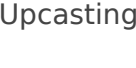







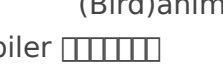

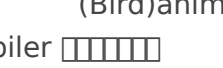



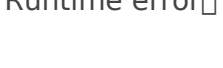


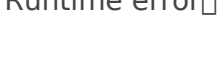
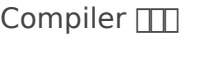



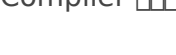
```
Dog dog2;
```

```
// dog2 = bird; // Obviously not working for compiling
```

```
// dog2 = (Dog)bird; // Cannot casting to another child class, compile error.
```

```
}
```

```
}
```

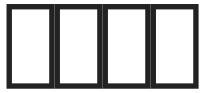
- Bird  Animal  Upcasting  Upcasting 
-  animal casting  Bird  Animal  Bird 
  -  Downcasting  Compiler 
-  (Bird)animal  Compiler  Compiler 
  -  JVM  ClassCastException  Runtime error 
-  Animal  class  Compiler 
  -  Compiler  ... 



# Spring (스프링) Spring Boot

Java 스프링

Spring (☐☐ Spring Boot)



# Spring

1.
2. Project  Gradle - Kotlin Kotlin DSL☐
3. Spring Boot
4. Project Metadata
5. Packaging  Jar☐
6. Java
7. Dependencies  Add Dependencies... Spring Web
8.  GENERATE