

Abstraction(Polymorphism+Interface)

```
public abstract class MediaPlayer {  
    // Abstract method to play media, the specifics will vary for different media types  
    public abstract void playMedia();  
  
    // Abstract method to stop media playback  
    public abstract void stopMedia();  
  
    // A concrete method that can be used by all subclasses  
    public void displayMediaInfo(String media) {  
        System.out.println("Playing: " + media);  
    }  
}
```

```
public class AudioPlayer extends MediaPlayer {  
    private String audioFile;  
  
    public AudioPlayer(String audioFile) {  
        this.audioFile = audioFile;  
    }  
  
    @Override  
    public void playMedia() {  
        super.displayMediaInfo(audioFile);  
        System.out.println("Audio playback starts.");  
    }  
  
    @Override
```

```
public void stopMedia() {  
    System.out.println("Audio playback stops.");  
}  
}
```

```
public class VideoPlayer extends MediaPlayer {  
    private String videoFile;
```

```
    public VideoPlayer(String videoFile) {  
        this.videoFile = videoFile;  
    }
```

```
@Override
```

```
public void playMedia() {  
    super.displayMediaInfo(videoFile);  
    System.out.println("Video playback starts.");  
}
```

```
@Override
```

```
public void stopMedia() {  
    System.out.println("Video playback stops.");  
}  
}
```

```
public class Main {  
    public static void main(String[] args) {  
        MediaPlayer myAudioPlayer = new AudioPlayer("song.mp3");  
        MediaPlayer myVideoPlayer = new VideoPlayer("movie.mp4");
```

```
myAudioPlayer.playMedia(); // Audio specific playback
myAudioPlayer.stopMedia();

myVideoPlayer.playMedia(); // Video specific playback
myVideoPlayer.stopMedia();
}
}
```

OUTPUT

Playing: song.mp3

Audio playback starts.

Audio playback stops.

Playing: movie.mp4

Video playback starts.

Video playback stops.