

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.