**Decision Tree: Rules corresponding to Titanic tree:**

* If sex is Female, Fare more than 48.2 and age less than 8.0, then Not Survived.
* If sex is Male, Age is less than 6.5 and Fare is less than 20.825, then Survived.
* If sex is Male, Age is more than 6.5, Fare is more than 26.269 and Fare is less than 26.469, then Survived.
* If sex is Female, Fare is less than 48.2, Fare is more than 27.825, Fare is less than 28.856, then Survived.
* If sex is Male, Age is less than 6.5, Fare is more than 20.825 and age is less than 0.96, then Survived.
* If sex is Female, Fare is less than 48.2, Fare is less than 27.825, Fare is more than 25.698, Age is less than 25.5, then Survived.
* If sex is Female, Fare is less than 48.2, Fare is more than 27.825, Fare is more than 28.856, Fare is more than 44.24, then Not Survived.
* If sex is Female, Fare more than 48.2 and age more than 8.0, Fare is less than 70.275 and Fare is less than 69.425, then Survived.
* If sex is Female, Fare more than 48.2 and age more than 8.0, Fare is less than 70.275 and Fare is more than 69.425, then Not Survived.
* If sex is Female, Fare more than 48.2 and age more than 8.0, Fare is more than 70.275 and Age is more than 25.5, then Not Survived.
* If sex is Male, Age is less than 6.5, Fare is more than 20.825 and age is more than 0.96 and Fare is more than 64.379, then Survived.
* If sex is Male, Age is more than 6.5, Fare is less than 26.269, Age is less than 13.5, Fare is less than 17.344, then Survived.
* If sex is Male, Age is more than 6.5, Fare is more than 26.269 and Fare is more than 26.469 and Fare is more than 387.665, then Survived.
* If sex is Female, Fare is less than 48.2, Fare is less than 27.825, Fare is less than 25.698, Fare is less than 24.075 and Fare is more than 24.808, then Not Survived.
* If sex is Female, Fare is less than 48.2, Fare is less than 27.825, Fare is more than 25.698, Age is more than 25.5 and Age is less than 27.0, then Not Survived.
* If sex is Female, Fare more than 48.2 and age more than 8.0, Fare is more than 70.275 and Age is less than 25.5 and Age is less than 24.5, then Survived.
* If sex is Female, Fare more than 48.2 and age more than 8.0, Fare is more than 70.275 and Age is less than 25.5 and Age is more than 24.5, then Not Survived.
* If sex is Male, Age is less than 6.5, Fare is more than 20.825 and age is more than 0.96 and Fare is less than 64.379 and Fare is more than 39.344, then Not Survived.
* If sex is Male, Age is more than 6.5, Fare is less than 26.269, Age is less than 13.5, Fare is more than 17.344, and Fare is less than 19.656, then Not Survived.
* If sex is Male, Age is more than 6.5, Fare is less than 26.269, Age is less than 13.5, Fare is more than 17.344, and Fare is more than 19.656, then Survived.
* If sex is Female, Fare is less than 48.2, Fare is less than 27.825, Fare is less than 25.698, Fare is less than 24.075 and Fare is more than 24.808 and Age is less than 37.5, then Not Survived.
* If sex is Female, Fare is less than 48.2, Fare is less than 27.825, Fare is less than 25.698, Fare is less than 24.075 and Fare is more than 24.808 and Age is more than 37.5, then Survived.
* If sex is Female, Fare is less than 48.2, Fare is less than 27.825, Fare is more than 25.698, Age is more than 25.5 and Age is more than 27.0 and Age is less than 43.0 then Survived.
* If sex is Female, Fare is less than 48.2, Fare is more than 27.825, Fare is more than 28.856, Fare is less than 44.24, Fare is less than 36.688 and Fare is more than 33.688, then Not Survived.
* If sex is Female, Fare is less than 48.2, Fare is more than 27.825, Fare is more than 28.856, Fare is less than 44.24, Fare is more than 36.688 and Age is less than 40.5, then Survived.
* If sex is Male, Age is less than 6.5, Fare is more than 20.825 and age is more than 0.96 and Fare is less than 64.379, Fare is less than 39.344 and Fare is more than 31.331, then Survived.
* If sex is Male, Age is more than 6.5, Fare is less than 26.269, Age is more than 13.5, Age is less than 32.5, Age is more than 30.75 and Fare is less than 7.815, then Not Survived.
* If sex is Male, Age is more than 6.5, Fare is less than 26.269, Age is more than 13.5, Age is more than 32.5, Fare is less than 7.91 and Fare is less than 7.227, then Not Survived.
* If sex is Female, Fare is less than 48.2, Fare is less than 27.825, Fare is less than 25.698, Fare is less than 24.075, Fare is less than 10.481, Fare is less than 8.04, Fare is less than 6.987, then Survived.
* If sex is Female, Fare is less than 48.2, Fare is less than 27.825, Fare is less than 25.698, Fare is less than 24.075, Fare is more than 10.481, Fare is less than 14.129, Age is more than 53.5, then Not Survived.
* If sex is Female, Fare is less than 48.2, Fare is less than 27.825, Fare is more than 25.698, Age is more than 25.5 and Age is more than 27.0 and Age is more than 43.0 and Age is more than 44.5,then Survived.
* If sex is Female, Fare is less than 48.2, Fare is more than 27.825, Fare is more than 28.856, Fare is less than 44.24, Fare is less than 36.688 and Fare is less than 33.688 and Fare is more than 31.331, then Survived.
* If sex is Female, Fare is less than 48.2, Fare is more than 27.825, Fare is more than 28.856, Fare is less than 44.24, Fare is more than 36.688 and Age is more than 40.5 and Fare is less than 39.644, then Survived.
* If sex is Female, Fare is less than 48.2, Fare is more than 27.825, Fare is more than 28.856, Fare is less than 44.24, Fare is more than 36.688 and Age is more than 40.5 and Fare is more than 39.644, then Not Survived.
* If sex is Male, Age is less than 6.5, Fare is more than 20.825 and age is more than 0.96 and Fare is less than 64.379, Fare is less than 39.344 and Fare is less than 31.331 and Fare is more than 26.95, then Not Survived.
* If sex is Male, Age is more than 6.5, Fare is less than 26.269, Age is more than 13.5, Age is less than 32.5, Age is less than 30.75, Fare is less than 2.006, Age is less than 22.0, then Not Survived.
* If sex is Male, Age is more than 6.5, Fare is less than 26.269, Age is more than 13.5, Age is less than 32.5, Age is less than 30.75, Fare is less than 2.006, Age is more than 22.0, then Survived.
* If sex is Male, Age is more than 6.5, Fare is less than 26.269, Age is more than 13.5, Age is less than 32.5, Age is more than 30.75 and Fare is more than 7.815 and Fare is less than 7.875, then Survived.
* If sex is Male, Age is more than 6.5, Fare is less than 26.269, Age is more than 13.5, Age is more than 32.5, Fare is more than 7.91,Fare is less than 7.988 and Age is less than 38.0, then Not Survived.
* If sex is Male, Age is more than 6.5, Fare is less than 26.269, Age is more than 13.5, Age is more than 32.5, Fare is more than 7.91,Fare is more than 7.988 and Fare is more than 23.35, then Not Survived.
* If sex is Male, Age is more than 6.5, Fare is more than 26.269 and Fare is more than 26.469 and Fare is less than 387.665, Age is less than 22.5, Fare is less than 109.892 and Age is more than 8.5, then Not Survived.
* If sex is Male, Age is more than 6.5, Fare is more than 26.269 and Fare is more than 26.469 and Fare is less than 387.665, Age is less than 22.5, Fare is more than 109.892 and Fare is less than 127.817,then Survived.
* If sex is Male, Age is more than 6.5, Fare is more than 26.269 and Fare is more than 26.469 and Fare is less than 387.665, Age is less than 22.5, Fare is more than 109.892 and Fare is more than 127.817,then Not Survived.
* If sex is Male, Age is more than 6.5, Fare is more than 26.269 and Fare is more than 26.469 and Fare is less than 387.665, Age is more than 22.5, Age is less than 27.5 and Fare is more than 151.29, then Not Survived.