Libraries Used

```
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
import warnings
warnings.filterwarnings("ignore")
from scipy.integrate import solve_ivp
```

Code for all the Task and their parts are written sequentially as in the assignment.
Code for each part is written under the sub heading of the part's name.
And to recreate the results for any part of the question you will have to run all the snippets within that subheading.