**run\_assignment.m**: The main script which runs Task 2-7. Task 6 takes quite alot of time for large n, I'd reduce n or comment that section of while running the rest of the script.

*Functions:*

**Ymodel\_i.m**: The polynomial model (model (2) in Ning et al. (2014) paper).

**Ymodel\_ii.m**: The combined Hill-based model (model (3) in Ning et al. (2014) paper).

**Ymodel\_iii.m**: The simplified Hill model (model from assignment instructions)

**func\_i.m**: Function to estimate the parameters of the polynomial model using the ordinary least square fitting criterion. This is numerically minimized (using fminunc) in run\_assigment.m.

**func\_ii.m**: Function to estimate the parameters of the combined Hill-based model using the ordinary least square fitting criterion.This is numerically minimized (using fminunc) in run\_assigment.m.

**func\_iii.m**: Function to estimate the parameters of the simplified Hill model using the ordinary least square fitting criterion.This is numerically minimized (using fminunc) in run\_assigment.m.