```
1    clear all
2
3    set more off
4
5    use "/Users/imisiaiyetan/Documents/Hw 5 Data.dta"
6
7    * Problem 1
8
9
10   * 1(a): Estimating fixed effect by constructing standard errors in
     2 ways
11
12   xtset id year
13   * The regular robust standard errors
14
15   xtreg lrpdi lsales, fe vce(robust)
16
17   * Clustering  by i, the of cross-sectional observation
18
19   xtreg lrpdi lsales, fe vce(cluster id)
20
21   * 1(b): Estimating fixed effect using Demean approach
22
23   egen lsale_bar = mean(lsales)
24
25   egen lrpdi_bar =mean(lrpdi)
26
27   gen z = lsales - lsale_bar
28
29   gen q = lrpdi - lrpdi_bar
30
31   reg z q
32
33   egen l_sale_bar = mean(lsales), by(id)
34
35   egen l_rpdi_bar =mean(lrpdi), by(id)
36
37   gen x = lsales - l_sale_bar
38
39   gen y = lrpdi - l_rpdi_bar
40
41   reg y x
42
43
44
45   * 1(c) Estimating the fixed effect using the poolregression with
     individual
46   * dummy variable and by cluster
```

```
47
48   * Estimating regression equation with individual dummy variable.
     Note that
49   *we removed D1 to avoid dummy variable trap.
50
51   reg lrpdi lsales d2 d3 d4 d5 d6 d7
52
53   * Estimating regression equation with clustering by i
54
55   reg lrpdi lsales i.id
56
57
58
59
60
61
```