

```
1
2 // Stata Workshop 2
3 // Department of Social Sciences, School of Arts and Social Sciences, The Open University of Hong
  Kong
4 // January, 2021
5
6 // Source of data: https://www.stata.com/bookstore/gentle-introduction-to-stata
7
8 // Part 1. Relationship between two categorical variables
9 // Dataset: gss2002_chapter6.dta
10
11 // 1.1. Cross-tabulation
12 tab1 marital sex // tabulation
13 tab marital sex // cross-tabulation
14 tab marital sex, row
15 tab marital sex, col
16 tab marital sex, row col
17
18 // 1.2. Chi-square test
19 tab marital sex, chi
20 tab marital sex, chi exp // show expected frequency
21
22 // Part 2. t test
23 // Dataset: gss2002_chapter7b.dta
24
25 // 2.1. One sample t-test
26 ttest hrs1 == 40 // employees work for 40 hours per week?
27 codebook wrkstat
28 ttest hrs1 == 40 if wrkstat == 1 // FT employees work for 40 hours per week?
29
30 // 2.2. Independent t-test
31 ttest hrs1, by (sex) // assuming equal variance
32 ttest hrs1, by (sex) unequal // unequal variance
33
34 // 2.3. Paired t-test
35 ttest paeduc == maeduc
```