

Hw13

20150056 국윤범

Problem 1

(a) Here, I categorize Wellbeing variable by rounding. (반올림으로 category 3, 4, 5,...로 만듦) and conduct One-way ANOVA.

```
> summary(an)
```

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
round_wb	5	1851	370.3	8.868	2.7e-07 ***
Residuals	134	5595	41.8		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(b) Tukey HSD test of (a).

```
> (tkh = TukeyHSD(an, conf.level = 0.95))
```

Tukey multiple comparisons of means
95% family-wise confidence level

Fit: aov(formula = HPI ~ round_wb, data = HD)

\$round_wb

	diff	lwr	upr	p adj
4-3	5.990000	-3.0351744	15.015174	0.3951971
5-3	9.366154	0.4909928	18.241315	0.0321313
6-3	12.927500	4.0649547	21.790045	0.0006337
7-3	13.435000	4.0930570	22.776943	0.0007946
8-3	16.853333	5.5396785	28.166988	0.0004483
5-4	3.376154	-1.1611600	7.913468	0.2677547
6-4	6.937500	2.4249128	11.450087	0.0002602
7-4	7.445000	2.0514267	12.838573	0.0014816
8-4	10.863333	2.5076455	19.219021	0.0033959
6-5	3.561346	-0.6431935	7.765886	0.1472114
7-5	4.068846	-1.0697669	9.207459	0.2056595
8-5	7.487179	-0.7062466	15.680606	0.0943780
7-6	0.507500	-4.6092929	5.624293	0.9997337
8-6	3.925833	-4.2539256	12.105592	0.7343394
8-7	3.418333	-5.2785423	12.115209	0.8652896

95% family-wise confidence level

