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Homework 1, Revision

Part II

1.
2. H_0: $\mu_1 = \mu_2$, H_1: $\mu_1 \neq \mu_2$

An independent groups t-test was performed comparing the mean blood pressure for the diet 1 ($M = 193, SD = 17.44$) with that for the diet 2 ($M = 176, SD = 13.87$). Using an alpha level of 0.05, this test was found to be statistically significant, $t(70) = 4.57$, $p < 0.01$, indicating that diet 1 and diet 2 have different blood pressure outcomes and, to be more specific, diet 2 is associated with lower blood pressures.

```
        Two Sample t-test

data:  hyptension by diet
t = 4.5757, df = 70, p-value = 2e-05
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
  9.590143 24.409857
sample estimates:
mean in group 1 mean in group 2
            193             176
```

3. Levene's test of equality of variances indicates the equality of variances can be assumed in our to groups:

```
modified robust Brown-Forsythe Levene-type test based on the absolute
       deviations from the median

data:  y
Test Statistic = 1.1056, p-value = 0.2966
```