Use a nonparametric test to see whether current salaries for clerical employees differ for the four gender/race groups. Compare your results from those from a parametric analysis. Summarize your conclusions.

**Part 1 output**

**NPar Tests**

**Kruskal-Wallis Test**

| **Ranks** | | | |
| --- | --- | --- | --- |
|  | SEX & RACE CLASSIFICATION | N | Mean Rank |
| CURRENT SALARY | WHITE MALES | 194 | 329.23 |
| MINORITY MALES | 64 | 244.55 |
| WHITE FEMALES | 176 | 163.64 |
| MINORITY FEMALES | 40 | 106.28 |
| Total | 474 |  |

| **Test Statisticsa,b** | |
| --- | --- |
|  | CURRENT SALARY |
| Chi-Square | 175.068 |
| df | 3 |
| Asymp. Sig. | .000 |
| a. Kruskal Wallis Test | |
| b. Grouping Variable: SEX & RACE CLASSIFICATION | |

**Part 2 Output**

**Oneway**

| **ANOVA** | | | | | |
| --- | --- | --- | --- | --- | --- |
| CURRENT SALARY | | | | | |
|  | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 5.688E9 | 3 | 1.896E9 | 54.405 | .000 |
| Within Groups | 1.638E10 | 470 | 3.485E7 |  |  |
| Total | 2.207E10 | 473 |  |  |  |

**Post Hoc Tests**

| **Multiple Comparisons** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| CURRENT SALARY  Bonferroni | | | | | | |
| (I) SEX & RACE CLASSIFICATION | (J) SEX & RACE CLASSIFICATION | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
| Lower Bound | Upper Bound |
| WHITE MALES | MINORITY MALES | 4891.727\* | 850.965 | .000 | 2637.12 | 7146.34 |
| WHITE FEMALES | 7107.449\* | 614.521 | .000 | 5479.29 | 8735.60 |
| MINORITY FEMALES | 8565.165\* | 1025.109 | .000 | 5849.17 | 11281.16 |
| MINORITY MALES | WHITE MALES | -4891.727\* | 850.965 | .000 | -7146.34 | -2637.12 |
| WHITE FEMALES | 2215.722 | 861.692 | .063 | -67.31 | 4498.75 |
| MINORITY FEMALES | 3673.438\* | 1189.843 | .013 | 520.98 | 6825.89 |
| WHITE FEMALES | WHITE MALES | -7107.449\* | 614.521 | .000 | -8735.60 | -5479.29 |
| MINORITY MALES | -2215.722 | 861.692 | .063 | -4498.75 | 67.31 |
| MINORITY FEMALES | 1457.716 | 1034.031 | .956 | -1281.92 | 4197.35 |
| MINORITY FEMALES | WHITE MALES | -8565.165\* | 1025.109 | .000 | -11281.16 | -5849.17 |
| MINORITY MALES | -3673.438\* | 1189.843 | .013 | -6825.89 | -520.98 |
| WHITE FEMALES | -1457.716 | 1034.031 | .956 | -4197.35 | 1281.92 |
| \*. The mean difference is significant at the 0.05 level. | | | | | | |