Instructions for Repeated SP MLE Software

- Save the repSPMLE.m file to your directory.

- Import your data into your MATLAB session. The data must be entered all in one row with with individual datapoints separated by spaces. Please arrange the data first by subject, then by rater, and then by replicate measurements by the given rater on the given subject.

- To call the function from your command window, type the following and press enter. The results will automatically be displayed.

```
repSPMLE(k,r,b,data);
```

- The inputs for this function are as follows:
    - `k` is the number of subjects used in each of the replicated Standard Plans
    - `r` is the number of raters used in each of the replicated Standard Plans
    - `b` is the number of replications of the standard plan
    - `data` is the data collected during the study (arranged as described above)

Instructions for Reliability Study Planning Software

- Save the assessplan.m file to your directory.

- To call the function from your command window, type the following and press enter. The results will automatically be displayed.

```
findbestconstrainedrepSP(N,rho,delta,beta,maxmeasparts,maxmeasops,maxparts,maxops);
```

- The inputs for this function are as follows:
    - `N` is the total number of measurements to be made in the study
    - `rho` is your estimate of the intraclass correlation coefficient (between 0 and 1)
    - `delta` is your estimate of the proportion of measurement system variation attributable to repeatability (between 0 and 1)
    - `beta` is your estimate of the proportion of the rater effect due to differences among raters (= 1 corresponds to no subject-by-rate interaction)
    - `maxmeasparts` is the maximum number of measurements on any one subject
    - `maxmeasops` is the maximum number of measurements by any one rater
    - `maxparts` is the maximum number of subjects used in the study
    - `maxops` is the maximum number of raters used in the study