# Summary

##### Team & their responsibilities

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| Ayesha Kasthuriarachchi  199337T | * Tested hypothesis 1 * Visualization plots for hypothesis 1 * Chi square test for number of kids (categorized) and hours (categorized) |
| Dulari Dayarathna  199314V | * Tested Hypothesis 2 * Created related visualization plots. * Created a contingency table for earnings (created categories) and education level. * Did chi-squared test for the relationship between earnings and education level (under other analysis) . |
| Chandrika Aruppola  199348D | * Tested hypothesis 3 mentioned above and created visualization plots related to the testing. |
| Gihani Gunarathna  199323X | * Tested hypothesis 4 * Visualization plots for hypothesis 4 * Executive Summary |

Git Repo Link

<https://github.com/AyeshaShehani/Data-Science-Assignment>

##### Questions

* Q 1: Whether there is a relationship between working hours and number of kids?
* Q 2: Whether there is a relationship between earnings and educational level?
* Q 3 : Whether there is a relationship between hours worked and age?
* Q 4 : Whether there is a relationship between earnings and the marital status?

##### Hypothesis

* + H1: There is no difference between average working hours of people who has more than 2 kids and those who has less than 2 kids.
  + H2 : There is no difference in average earnings between two education categories (education>=12000 and education<12000)
  + H3 : There is no difference in average hours between 2 age categories(age>40 and age<40)
  + H4 : There is no difference in average earnings between singles and other marital status categories

##### Assumptions

* + The sample represents the population in terms of age, gender and etc.

##### Reference

* **https://psidonline.isr.umich.edu/**