Untitled

Grusha Prasad

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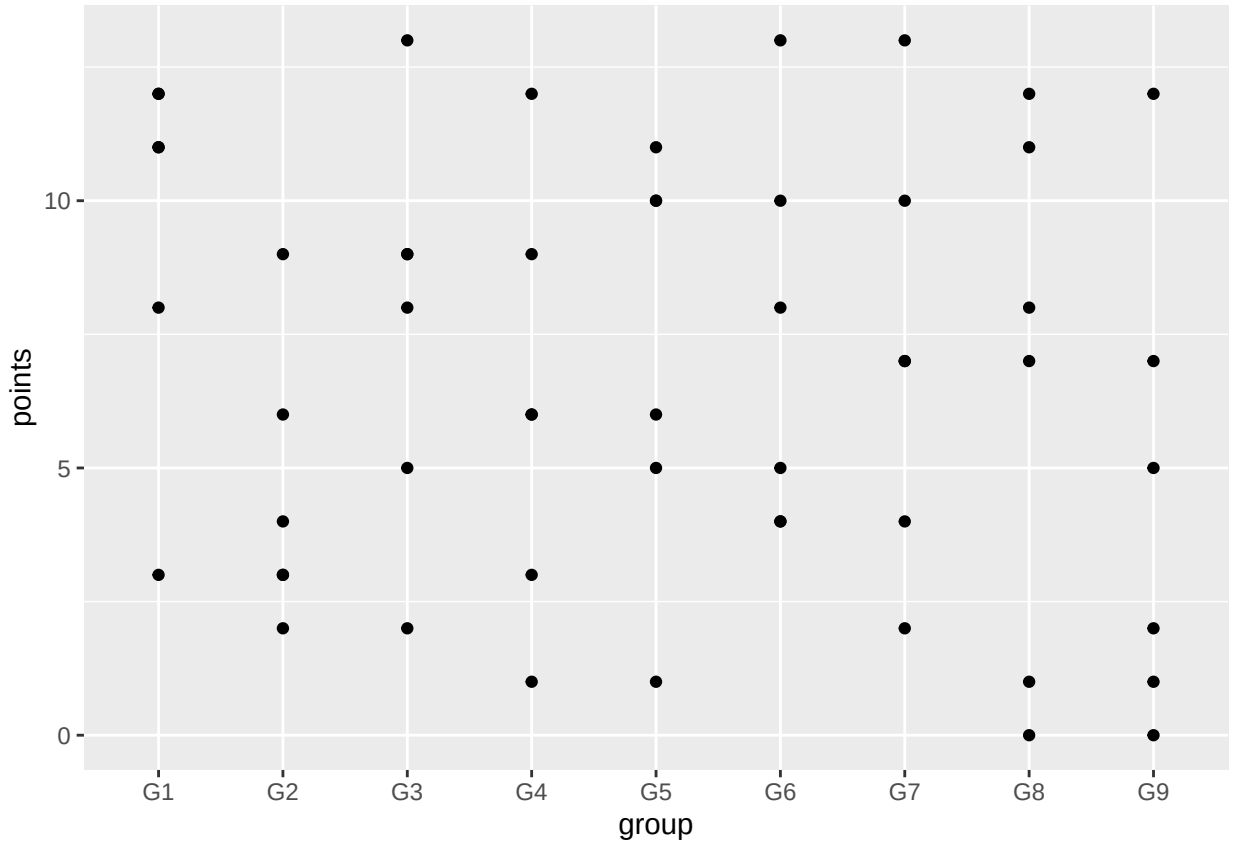
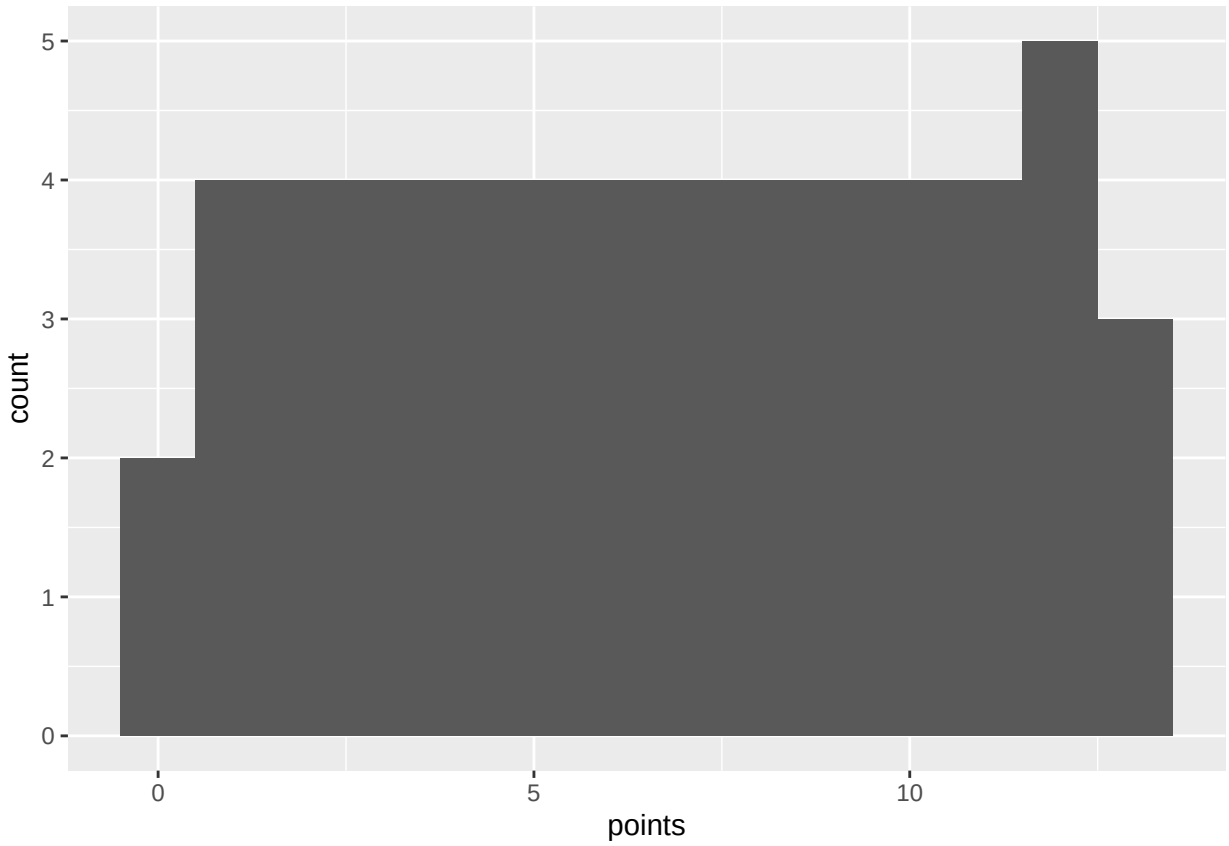
Getting CI across 9 experiments

```
cards = read.csv('cards.csv') %>%
  gather(key="group", value = "points", starts_with("g"))
```

```
ggplot(cards, aes(x=group, y=points)) +
  geom_point()
```

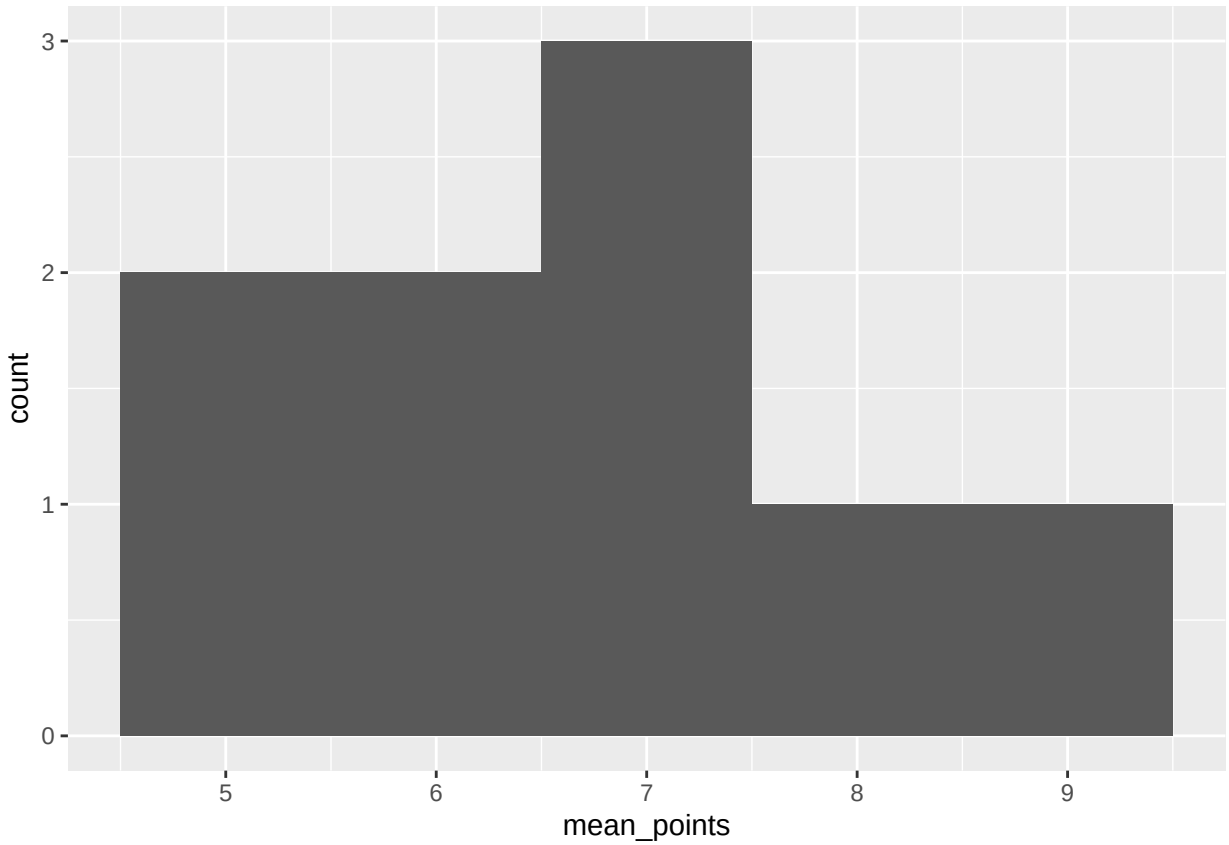



```
ggplot(cards, aes(x=points)) +
  geom_histogram(binwidth = 1)
```




```
cards_summ = cards%>%
  group_by(group) %>%
  summarise(mean_points = mean(points, na.rm=TRUE))
```

```
ggplot(cards_summ, aes(x=mean_points)) +
  geom_histogram(binwidth = 1)
```




```
quantile(cards_summ$mean_points, c(0.025, 0.975), na.rm=TRUE)
```

```
##     2.5%    97.5%
## 4.500000 9.133333
```

```
quantile(cards_summ$mean_points, c(0.25, 0.75), na.rm=TRUE)
```

```
##      25%      75%
## 6.166667 7.333333
```

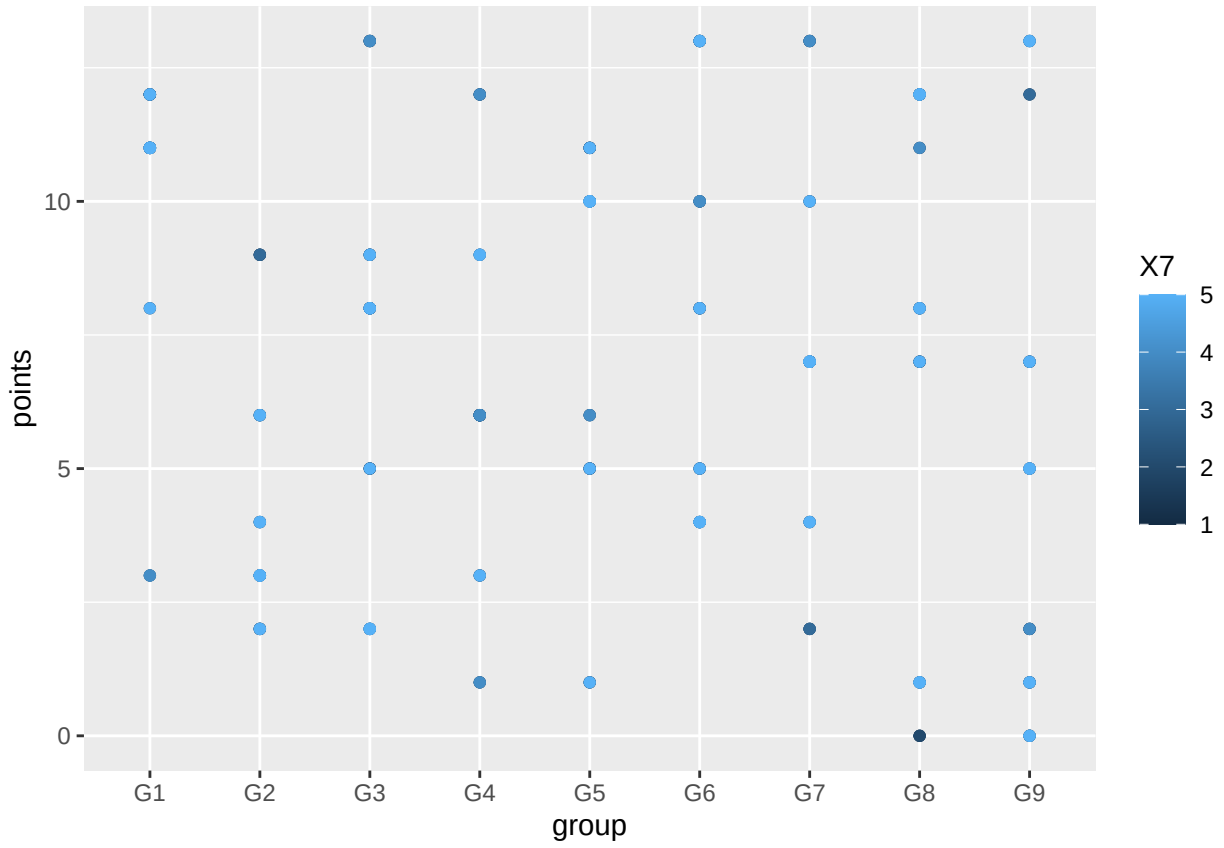
```
## How could you get 90%, 80% and 50% CI?
```

Repeating experiments with bootstrapping

```
cards_all = read.csv('cards_allexp.csv') %>%
  gather(key="group", value = "points", starts_with("g"))
```

```
ggplot(cards_all, aes(x=group, y=points, color=X7)) +
  geom_point()
```

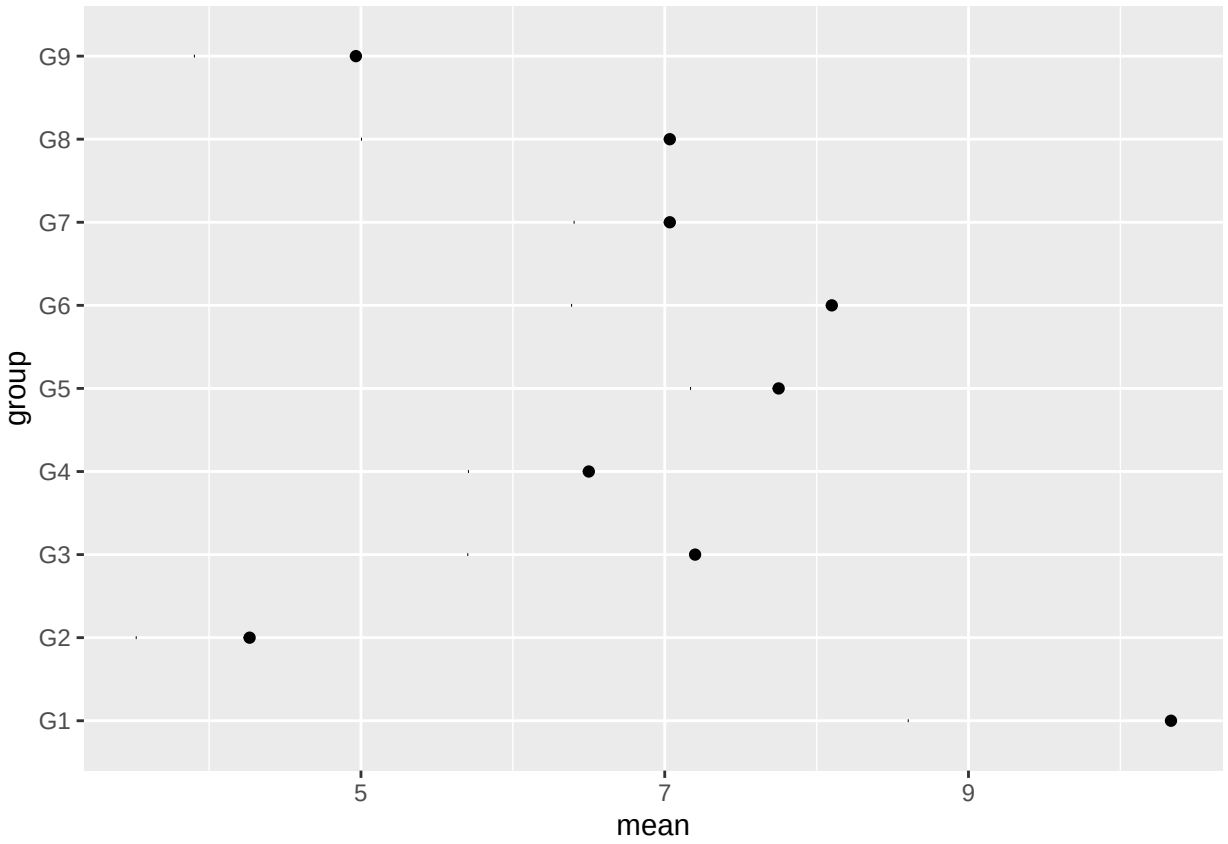
```
## Warning: Removed 5 rows containing missing values (`geom_point()`).
```




```
cards_all_summ = cards_all %>%
  rename(Experiment = X7) %>%
  group_by(group, Experiment) %>%
  summarise(mean_points=mean(points)) %>%
  ungroup() %>%
  group_by(group) %>%
  summarise(lower = quantile(mean_points, c(0.025), na.rm=TRUE),
            upper = quantile(mean_points, c(0.025), na.rm=TRUE),
            mean = mean(mean_points, na.rm = TRUE))
```

```
## `summarise()` has grouped output by 'group'. You can override using the
## `.groups` argument.
```

```
ggplot(cards_all_summ, aes(x=mean, y=group)) +
  geom_point() +
  geom_linerange(aes(xmin=lower, xmax=upper))
```




```
quantile(cards_all_summ$mean, c(0.025, 0.975), na.rm=TRUE)
```

```
##     2.5%    97.5%
## 4.406667 9.886667
```