Quiz 1 with Solutions

[Old Midterm Problem] The exam scores for the students in an introductory statistics class are as follows.

88	82	89	70	85
63	100	86	67	39
90	96	76	34	81
64	75	84	89	96
88	91			

(1) Find the mean and sample variance for (sub)sample consisting of the first 5 measurements.

```
> a_c(88,82,89,70,85)
> a
[1] 88 82 89 70 85
> mean(a)
[1] 82.8
> var(a)
[1] 58.7
```

(2) Find the "5-number summary" for the above data set. What is IQR?

```
> b
  88  82  89  70  85  63 100  86  67  39  90
  96  76  34  81  64  75  84  89  96  88  91
> median(b)
[1] 84.5
> bb_sort(b)
> bb
  34  39  63  64  67  70  75  76  81  82  84
  85  86  88  88  89  89  90  91  96  96 100
> cc_bb[1:11]
> median(cc)
[1] 70
> dd_bb[12:22]
> median(dd)
[1] 89

"5 # summary": 34, 70, 84.5, 89, 100; IQR=89-70=19
```