

PP4RS | R Module

Slot 2 - Additional Exercises

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Slot 2

Exercises Loops

Create the dataframe `my_df <- data.frame(a = rnorm(10), b = rnorm(10), c = rnorm(10), d = rnorm(10))`. Print the median of column a.

```
my_df <- data.frame(a = rnorm(10), b = rnorm(10),  
                    c = rnorm(10), d = rnorm(10))  
median(my_df$a)
```

```
## [1] -0.2215841
```

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```
## [1] -0.2215841
```

Print the sentence "Median for variable a is: X.XXXXXX", where X.XXXXXX is the actual median of a.

(hint: use the `cat` function, the `names` function and subsetting with square brackets)

```
cat("Median for variable ", names(my_df)[[1]], " is: ",  
    median(my_df$a), sep='')
```

```
## Median for variable a is: -0.2215841
```

Exercises Loops

Print the sentence "Median for variable p is: X.XXXXXX", where X.XXXXXX is the actual median of p for each value p of our data frame (so for a, b, c, d).

(hint: use your result from above and make a loop out of it)

```
for (name in names(my_df)) {  
  cat("Median for variable ", name, " is: ",  
      median(my_df[[name]]), '\n', sep='')  
}
```

```
## Median for variable a is: -0.2215841  
## Median for variable b is: -0.1583671  
## Median for variable c is: -0.1061311  
## Median for variable d is: 0.425925
```