

# R code for POLI502 Lab

## Week 1-A: individual Exercises

Author: Conor Craig

### Instruction:

Complete the following 5 tasks by modifying this R code.

Write everything in rmd or qmd as you are taught in class

Upload 1) rmd/qmd and 2) pdf output on your github repository so we can grade it.

Let us know what your github repo address, so we can fork it to us.

Task 1. Modify the author name above from “Howard Liu” to your name

Task 2. Perform the following calculations by writing R commands

---

2-1: Multiply 4 by 30 plus 6, and then raise the answer to the power of 0.5

```
((4*(30 + 6)) ^ .5)
```

```
## [1] 12
```

2-2: Multiply 4 by 30, then add 6 and then raise the answer to the power of 0.5

```
((4*30) + 6) ^ .5)
```

```
## [1] 11.22497
```

Note that 2-1 and 2-2 should give you DIFFERENT answers, because these

are different operations.

### Task 3. Working with objects

3-1: Create an object called “X1” which is the number 73

```
x1 <- 73
```

3-2: Create another object called “X2” which is the answer to the sum  $99 + 38$

```
x2 <- 99 + 38
```

3-3: Multiply X1 and X2 together and store the answer as another object called “X3”

```
x3 <- x1 * x2
```

3-4: Subtract 1 from X3, and then raise the answer to the power of 0.25

```
(x3 - 1) ^ .25
```

```
## [1] 10
```

Note: the answer should be 10.

#### Task 4. Calculation using objects

Redo the calculation in 2-1 (Multiply 4 by 30 plus 6, and then raise the

answer to the power of 0.5), but this time do so by creating objects.

Take the following steps

4-1: Create an object called part.1 that is equal to “30 plus 6”

```
part.1 <- 30 + 6
```

4-2: Create an object called part.2 that is equal to 4 times part.1

```
part.2 <- part.1 *4
```

4-3: Raise part.2 to the power of 0.5

```
part.2 ^ .5
```

```
## [1] 12
```

The numerical answer you get here should be the same as your answer for 2.1

Task 5. Execute the entire file. Make sure that you don't get any error

messages, such as "Error: unexpected symbol in ..." shown in Red.

If you receive an error message, it's probably because you forgot to comment

out some lines. Comment them out so you won't get any error message.

End of file