

R code for Data Science for Beginners Day 1: Individual Exercise

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09/07/2024

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Exercise 1

Task 1. Modify the author name

Task 2. Perform the following calculations by writing R commands

2-1:

```
result1 <- (4 * (30 + 6)) ^ 0.5 print(result1)
```

should print 12

2-2:

```
result2 <- (4*30 + 6) ^ 0.5 print(result2) # should print 11.22497
```

Task 3. Working with objects

3-1:

```
X1 <- 73 # created an object # 3-2: X2 <- (99+38) # created a second object # 3-3: X3 <- (X1*X2) #  
created a third object
```

3-4

```
(X3-1) ^ 0.25 print(result3) # should print 10
```

Task 4. Calculation using objects

4-1:

```
part.1 <- (30+6) # created an object equal to 36
```

4-2:

```
part.2 <- (part.1*4) # created a second object equal to 144
```

4-3:

```
part.2 ^ 0.5 # should print 12
```

Task 5. Detecting R data types

5-1

```
color_vector <- c("blue", "green", "red") is_character_vector <- is.character(color_vector) print(is_character_vector)
```

5-2

```
factor_vector <- factor(c(2,4,6)) # created a factor vector print(factor_vector)
```

Task 6. Testing NA

6-1

```
numeric_vector_with_NA <- c(1,2,NA,4) # created a numeric vector with an NA
```

6-2

```
na_positions <- which(is.na(numeric_vector_with_NA)) print (na_positions) #should print 3
```

6-3

```
numeric_vector_with_NaN <- c(2,4,NaN,6) # created a numeric vector with an NaN
```

6-4

```
nan_positions <- which(is.nan(numeric_vector_with_NaN)) print(nan_positions) #should print 3
```