

Lab Exercise # 1

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```
2 + 2
```

```
## [1] 4
```

```
my_sequence <- -5:5  
print(my_sequence)
```

```
## [1] -5 -4 -3 -2 -1 0 1 2 3 4 5
```

```
my_vector <- seq(1, 3, by=0.2)  
print(my_vector)
```

```
## [1] 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0
```

```
ages <- c(34, 28, 22, 36, 27, 18, 52, 39, 42, 29, 35, 31, 27, 22, 37, 34, 19, 20, 57, 49, 50, 37, 46, 25, 17, 37)  
ages[-1]
```

```
## [1] 28 22 36 27 18 52 39 42 29 35 31 27 22 37 34 19 20 57 49 50 37 46 25 17 37  
## [26] 43 53 41 51 35 24 33 41 53 40 18 44 38 41 48 27 39 19 30 61 54 58 26 18
```

```
x <- c("first"=3, "second"=0, "third"=9)
```

```
print(x)
```

```
## first second third  
##      3      0      9
```

```
print(names(x))
```

```
## [1] "first" "second" "third"
```

```
result <- x[c("first", "third")]  
print(result)
```

```
## first third  
##      3      9
```

```
x <- -3:2
```

```
x[2] <- 0
```

```
x
```

```
## [1] -3 0 -1 0 1 2
```

```
month <- c("Jan", "Feb", "March", "Apr", "May", "June")
price_per_liter_php <- c(52.50, 57.25, 60.00, 65.00, 74.25, 54.00)
purchase_quantity_liters <- c(25, 30, 40, 50, 10, 45)
```

```
fuel_data <- data.frame(
  Month = month,
  Price_per_Liter_PHP = price_per_liter_php,
  Purchase_Quantity_Liters = purchase_quantity_liters
)
```

```
print(fuel_data)
```

```
##   Month Price_per_Liter_PHP Purchase_Quantity_Liters
## 1   Jan                52.50                      25
## 2   Feb                57.25                      30
## 3 March                60.00                      40
## 4   Apr                65.00                      50
## 5   May                74.25                      10
## 6   June               54.00                      45
```

```
data <- c(length(rivers), sum(rivers), mean(rivers), median(rivers), var(rivers), sd(rivers), min(rivers))
```

```
#print(data) sa console para makita ang results
```

```
#a.
```

```
powerRanking <- c(1,2,3,4,5,6,7,8,9,10,
                  11,12,13,14,15,16,17,18,19,20,
                  21,22,23,24,25)
```

```
celebrityName <- c("Tom Cruise", "Rolling Stones", "Oprah Winfrey", "U2",
                  "Tiger Woods", "Steven Spielberg", "Howard Stern", "50 Cent",
                  "Cast of the Sopranos", "Dan Brown", "Bruce Springsteen",
                  "Donald Trump", "Muhammad Ali", "Paul McCartney", "George Lucas",
                  "Elton John", "David Letterman", "Phil Mickelson", "J.K. Rowling",
                  "Brad Pitt", "Peter Jackson", "Dr. Phil McGraw", "Jay Leno",
                  "Celine Dion", "Kobe Bryant")
```

```
pay <- c(67,90,225,110,90,332,302,41,52,88,
         55,44,55,40,233,34,40,47,75,25,
         39,45,32,40,31)
```

```

#b.

index <- which(celebrityName == "J.K. Rowling")

powerRanking[index] <- 15
pay[index] <- 90

data.frame(Power_Ranking = powerRanking,
           Celebrity = celebrityName,
           Pay = pay)

```

##	Power_Ranking	Celebrity	Pay
## 1	1	Tom Cruise	67
## 2	2	Rolling Stones	90
## 3	3	Oprah Winfrey	225
## 4	4	U2	110
## 5	5	Tiger Woods	90
## 6	6	Steven Spielberg	332
## 7	7	Howard Stern	302
## 8	8	50 Cent	41
## 9	9	Cast of the Sopranos	52
## 10	10	Dan Brown	88
## 11	11	Bruce Springsteen	55
## 12	12	Donald Trump	44
## 13	13	Muhammad Ali	55
## 14	14	Paul McCartney	40
## 15	15	George Lucas	233
## 16	16	Elton John	34
## 17	17	David Letterman	40
## 18	18	Phil Mickelson	47
## 19	15	J.K. Rowling	90
## 20	20	Brad Pitt	25
## 21	21	Peter Jackson	39
## 22	22	Dr. Phil McGraw	45
## 23	23	Jay Leno	32
## 24	24	Celine Dion	40
## 25	25	Kobe Bryant	31