RWorksheet_Punay#2

```
#1
#a.
seq (-5, 5)
```

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

The output is generated numeric vector containing the integers from -5 to 5, in ascending order

```
#b.
x <- 1:7
x
```

```
## [1] 1 2 3 4 5 6 7
```

```
#2.
myvector <- seq(1, 3, by=0.2)
myvector
```

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

The output includes all values from 1 up to and including 3, where each subsequent value is 0.2 greater than the previous one.

```
#3.
age <- 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, 43, 53, 41, 51, 35,
24,33, 41, 53, 40, 18, 44, 38, 41, 48, 27, 39, 19, 30, 61, 54, 58, 26,
18)

#a
age[3]
```

```
## [1] 22
```

```
#b
age [c(2,4)]
```

```
## [1] 28 36
```

```
#c
age[-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
```

```
#4.
x <- c("first"=3, "second"=0, "third"=9)
names(x)
```

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

```
x[c("first", "third")]
```

```
## first third
```

```
##     3     9
```

```
#5.
x <- -3:2
x
```

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

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

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

The output of the 2nd element changed and modified into 0

```
#6.
month <- c('Jan', 'Feb', 'March', 'Apr', 'May', 'June')
price <- c(52.50, 57.25, 60.00, 65.00, 74.25, 54.00)
liters <- c(25, 30, 40, 50, 10, 45)

fuel <- data.frame(month, price, liters)
fuel
```

```
##   month price 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
```

```
avg <- weighted.mean(liters, price)
avg
```

```
## [1] 32.65152
```

```
#7.
data <- c(length(rivers), sum(rivers), mean(rivers), median(rivers), var(rivers),
sd(rivers), min(rivers), max(rivers))
data
```

```
## [1]    141.0000  83357.0000    591.1844    425.0000 243908.4086    493.8708
## [7]    135.0000   3710.0000
```

```
#8.
#a.
rank <- 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)

celeb <- 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','Bradd Pitt',
           'Peter Jackson','Dr. Phil McGraw','Jay Leno','Celine Dion','Kobe Bryant')

pay <- c(67,90,225,110,90,332,302,41,52,88,55,44,55,40,223,34,40,47,75,25,39,45,32,40,31)


forbes <- data.frame (rank,celeb,pay)
forbes
```

```
##    rank                celeb 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 223
## 16   16            Elton John  34
## 17   17      David Letterman  40
## 18   18       Phil Mickelson  47
## 19   19          J.K Rowling  75
## 20   20           Bradd 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
```

```r
#b.
forbes$rank[forbes$celeb=="J.K Rowling"] <- 15
forbes$pay[forbes$celeb=="J.K Rowling"] <- 90

forbes[forbes$celeb=="J.K Rowling",]
```

```
##    rank       celeb pay
## 19   15 J.K Rowling  90
```

C.

The dataset lists 25 celebrities (celeb), each with a corresponding rank (1 to 25) and their pay (in millions, presumably).

The rank reflects their position on a list of highest-paid or most influential celebrities.

The pay column shows how much each celebrity earned in a given time period.