

# Assignment – 03

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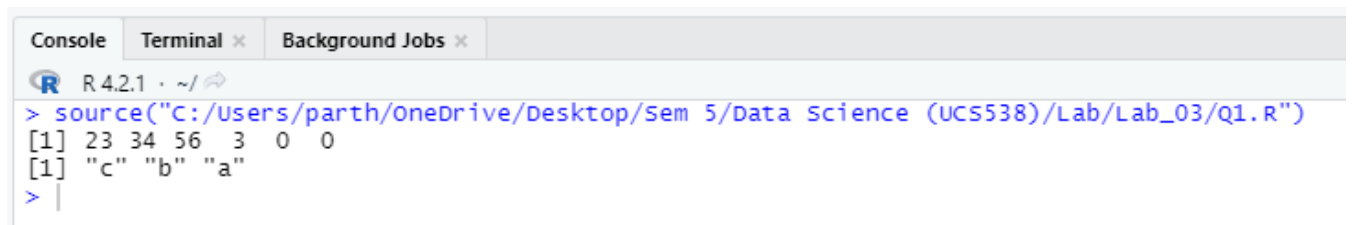
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Q1) Code:

```
A <- c(23, 34, 56, 3, 0, 0)
B <- c('c', 'b', 'a')
print(A)
print(B)
|
```

Ans:

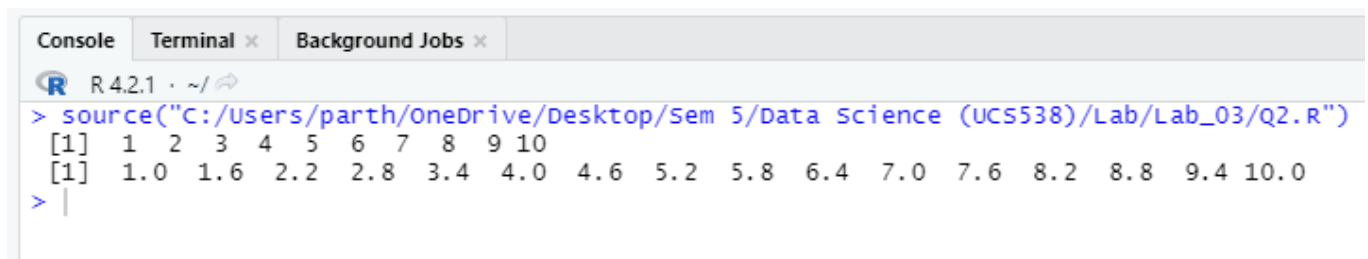
A screenshot of an R console window showing the execution of the code for Q1. The console has tabs for 'Console', 'Terminal', and 'Background Jobs'. The R version is 4.2.1. The code executed is: source("C:/Users/parth/OneDrive/Desktop/Sem 5/Data Science (UCS538)/Lab/Lab\_03/Q1.R"). The output shows two lines: [1] 23 34 56 3 0 0 and [1] "c" "b" "a".

```
R 4.2.1 · ~/
> source("C:/Users/parth/OneDrive/Desktop/Sem 5/Data Science (UCS538)/Lab/Lab_03/Q1.R")
[1] 23 34 56 3 0 0
[1] "c" "b" "a"
> |
```

Q2) Code:

```
m <- 1
n <- 10
x <- seq(1,n)
y <- seq(m, n, by = 0.6)
print(x)
print(y)|
```

Ans:

A screenshot of an R console window showing the execution of the code for Q2. The console has tabs for 'Console', 'Terminal', and 'Background Jobs'. The R version is 4.2.1. The code executed is: source("C:/Users/parth/OneDrive/Desktop/Sem 5/Data Science (UCS538)/Lab/Lab\_03/Q2.R"). The output shows two lines: [1] 1 2 3 4 5 6 7 8 9 10 and [1] 1.0 1.6 2.2 2.8 3.4 4.0 4.6 5.2 5.8 6.4 7.0 7.6 8.2 8.8 9.4 10.0.

```
R 4.2.1 · ~/
> source("C:/Users/parth/OneDrive/Desktop/Sem 5/Data Science (UCS538)/Lab/Lab_03/Q2.R")
[1] 1 2 3 4 5 6 7 8 9 10
[1] 1.0 1.6 2.2 2.8 3.4 4.0 4.6 5.2 5.8 6.4 7.0 7.6 8.2 8.8 9.4 10.0
> |
```

Q3) Code:

```
d <- seq(1:50)
print(cut(d,breaks=10))
print(d)
```

Ans:

```
Console Terminal Background Jobs
R 4.2.1 ~
> source("C:/Users/parth/OneDrive/Desktop/Sem 5/Data science (UCS538)/Lab/Lab_03/Q3.R")
[1] (0.951,5.9] (0.951,5.9] (0.951,5.9] (0.951,5.9] (0.951,5.9] (5.9,10.8] (5.9,10.8] (5.9,10.8] (5.9,10.8] (10.8,15.7] (10.8,15.7]
[13] (10.8,15.7] (10.8,15.7] (10.8,15.7] (15.7,20.6] (15.7,20.6] (15.7,20.6] (15.7,20.6] (15.7,20.6] (20.6,25.5] (20.6,25.5] (20.6,25.5]
[25] (20.6,25.5] (25.5,30.4] (25.5,30.4] (25.5,30.4] (25.5,30.4] (25.5,30.4] (30.4,35.3] (30.4,35.3] (30.4,35.3] (30.4,35.3] (35.3,40.2]
[37] (35.3,40.2] (35.3,40.2] (35.3,40.2] (35.3,40.2] (40.2,45.1] (40.2,45.1] (40.2,45.1] (40.2,45.1] (40.2,45.1] (45.1,50] (45.1,50]
[49] (45.1,50] (45.1,50]
Levels: (0.951,5.9] (5.9,10.8] (10.8,15.7] (15.7,20.6] (20.6,25.5] (25.5,30.4] (30.4,35.3] (35.3,40.2] (40.2,45.1] (45.1,50]
[1] 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 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49
[50] 50
> |
```

Q4) Code:

```
for (x in 1:5) {
  print("3,4,5")
}
```

Ans:

```
Console Terminal Background Jobs
R 4.2.1 ~
> source("C:/Users/parth/OneDrive/Desktop/Sem 5/Data science (UCS538)/Lab/Lab_03/Q4.R")
[1] "3,4,5"
[1] "3,4,5"
[1] "3,4,5"
[1] "3,4,5"
[1] "3,4,5"
> |
```

Q5) Code:

```
print(runif(8, min=1, max=1000))
```

Ans:

```
Console Terminal Background Jobs
R 4.2.1 ~
> source("C:/Users/parth/OneDrive/Desktop/Sem 5/Data science (UCS538)/Lab/Lab_03/Q5.R")
[1] 947.5135 842.0531 257.1155 676.6999 214.8001 870.4414 393.2661 798.0053
> |
```

Q6) Code:

```
A <- c(23,34,56,3,0,0)
C <- c(2,3,4,5,6,7)
for(i in 1:length(A)){
  A[i] = A[i]+C[i]
}
print(A)
```

Ans:

```
Console Terminal x Background Jobs x
R 4.2.1 · ~/
> source("C:/Users/parth/OneDrive/Desktop/Sem 5/Data Science (UCS538)/Lab/Lab_03/Q6.R")
[1] 25 37 60 8 6 7
> |
```

Q7) Code:

```
D<-c(6,7)
A <- c(25,37,60,8,6,7)
for(i in 1:length(D)){
  A[i] = A[i]+D[i]
}
print(A)
```

Ans:

```
Console Terminal x Background Jobs x
R 4.2.1 · ~/
> source("C:/Users/parth/OneDrive/Desktop/Sem 5/Data Science (UCS538)/Lab/Lab_03/Q7.R")
[1] 31 44 60 8 6 7
> |
```

Q8) Code:

```
C <- c(2,3,4,5,6,7)
print(sqrt(C))
```

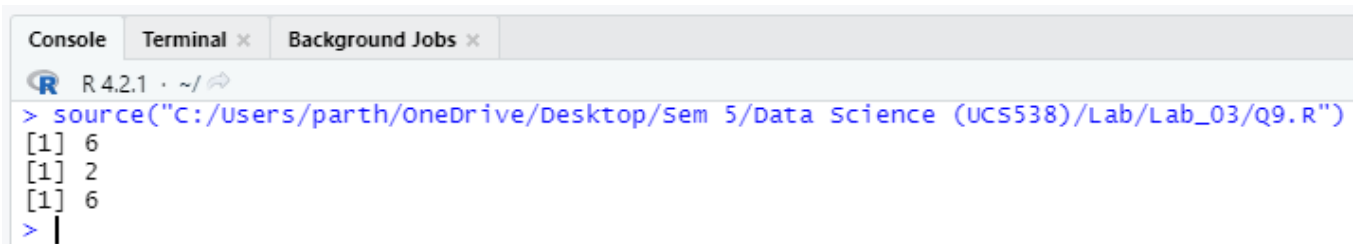
Ans:

```
Console Terminal x Background Jobs x
R 4.2.1 · ~/
> source("C:/Users/parth/OneDrive/Desktop/Sem 5/Data Science (UCS538)/Lab/Lab_03/Q8.R")
[1] 1.414214 1.732051 2.000000 2.236068 2.449490 2.645751
> |
```

Q9) Code:

```
D<-c(6,7)
A <- c(25,37,60,8,6,7)
C <- c(2,3,4,5,6,7)
print(length(A))
print(length(D))
print(length(C))
```

Ans:



```
R 4.2.1 · ~/
> source("C:/Users/parth/OneDrive/Desktop/Sem 5/Data Science (UCS538)/Lab/Lab_03/Q9.R")
[1] 6
[1] 2
[1] 6
> |
```