

Reg. No. 11900868

Roll. No. B55

R Lab Evaluation 2:

Q1.

```
> data <- data.frame(emp_id = c(1001,4901,3120,4340,2347), emp_name = c("Rick", "Dan","Michelle","Ryan","Gary"),salary =  
c(6230,5150,NA,7290,8435),department = c("A", "B", "C", "D", "E"))  
> data  
  emp_id emp_name salary department  
1  1001    Rick   6230           A  
2  4901     Dan   5150           B  
3  3120 Michelle    NA           C  
4  4340     Ryan   7290           D  
5  2347     Gary   8435           E  
> |
```

a.

```
> a <- data[data$emp_id == 2347, c("emp_name", "department")]  
> a  
  emp_name department  
5     Gary           E  
>
```

b.

```
> data <- rbind(data, data.frame(emp_id = 2313,emp_name = "Sandy", salary = 5314,department = "F"))  
> data  
  emp_id emp_name salary department  
1  1001    Rick   6230           A  
2  4901     Dan   5150           B  
3  3120 Michelle    NA           C  
4  4340     Ryan   7290           D  
5  2347     Gary   8435           E  
6  2313    Sandy   5314           F  
>
```

C.

```
> length(data[complete.cases(data),1])  
[1] 5
```

d.

Way 1:

```
> data[,1]  
[1] 1001 4901 3120 4340 2347 2313  
> |  
> data[, "emp_id"]  
[1] 1001 4901 3120 4340 2347 2313  
> |
```

Way 2:

```
> data$emp_id  
[1] 1001 4901 3120 4340 2347 2313  
>
```

Q2.

A)

```
> vc1 <- c("Prabodh", "Amit", "Rohit", "Bittu")
```

B)

Method 1 :

```
> sort(vc1)
[1] "Amit"      "Bittu"     "Prabodh"  "Rohit"
```

method 2:

```
> vc1[order(vc1)]
[1] "Amit"      "Bittu"     "Prabodh"  "Rohit"
>
```

Q3)

A)

```
> vc2 <- rep(1:17, times = 1:17)
> vc2
 [1]  1  2  2  3  3  3  4  4  4  4  5  5  5  5  5  6  6  6  6  6  6  7  7  7  7  7  7  7  8  8  8  8  8  8  8  8  9  9  9  9
[41]  9  9  9  9  9 10 10 10 10 10 10 10 10 10 10 11 11 11 11 11 11 11 11 11 11 11 12 12 12 12 12 12 12 12 12 12 12 12 12 13 13
[81] 13 13 13 13 13 13 13 13 13 13 13 13 14 14 14 14 14 14 14 14 14 14 14 14 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15
[121] 16 16 16 16 16 16 16 16 16 16 16 16 16 16 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17 17 17 17 17 17 17 17 17
>
```

B)

```
> matrix(1:15, 5, 3, dimnames = list(c("a","b", "c","d","e"),c("a","b", "c"))))
  a  b  c
a 1  6 11
b 2  7 12
c 3  8 13
d 4  9 14
e 5 10 15
```