

Roll number -> 11914005

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### Question 1 – Data frame

(a) Create data frame

```
> emp.newdata <- data.frame(  
+   emp_id = c(1001,4901,3120,4340,2347),  
+   emp_name = c("Rick","Dan","Michalle","Ryan","Gary"),  
+   emp_salary = c(6230,5150,NA,7290,8435),  
+   department = c("A","B","C","D","E"),  
+   stringsAsFactors = FALSE  
+ )  
> print(emp.newdata)
```

	emp_id	emp_name	emp_salary	department
1	1001	Rick	6230	A
2	4901	Dan	5150	B
3	3120	Michalle	NA	C
4	4340	Ryan	7290	D
5	2347	Gary	8435	E

```
> |
```

a- Fetch name for id = 2347

```
> datarev<- subset(emp.newdata,emp_id==2347)$emp_name  
> print(datarev)  
[1] "Gary"
```

b- Add new row

```
> emp.newdata<-rbind(emp.newdata,data.frame(emp_id=2313,emp_name="Sandy",salary$  
> print(emp.newdata)
```

	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	5341	F

```
> |
```

D –fetch the coloum

```

> emp.newdata<-emp.newdata[1:2]
> print(emp.newdata)
  emp_id emp_name
1   1001      Rick
2   4901       Dan
3   3120 Michelle
4   4340      Ryan
5   2347      Gary
6   2313      Sandy
> |
> str(emp.newdata)
'data.frame':   6 obs. of  2 variables:
 $ emp_id  : num  1001 4901 3120 4340 2347 ...
 $ emp_name: chr   "Rick" "Dan" "Michelle" "Ryan" ...
> |

```

Question 2-

(a) Create vector

```

> student<-c("AMIT","ROHIT","ABHISHEK","PRABODH")
> print(student)
[1] "AMIT"      "ROHIT"     "ABHISHEK" "PRABODH"

```

B-sort

```

> r<-c("amit","prabodh","rohit","abhi")
> sort(r)
[1] "abhi"      "amit"      "prabodh" "rohit"
> |

```

---

### Question 3-

Create vector

```
> c<- rep(1:17, times = 1:17)
> c
 [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
[26] 7 7 7 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 10 10 10 10 10
[51] 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
[76] 12 12 12 13 13 13 13 13 13 13 13 13 13 13 13 13 14 14 14 14 14 14 14 14 14
[101] 14 14 14 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 16 16 16 16
[126] 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
[151] 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
> |
```