Quiz #2

Instructions:

- You may see your submission for quiz questions as `incorrect` even if correct. Please ignore it.
- You can try any number of times.
- Remember, when you start over, your previous answers may be lost.
- Print/save as pdf to submit your answers after completion.
  (For example:*Quiz2_ccherukuri.pdf*)
- Due Date : **04/25/2018**

Quiz

1.'is.vector' can be used as a test to check if an object is a vector or not?

- ○ False
- ◉ True

Submit Answer

2.How many types of atomic vector are in R?

- ○ 4
- ◉ 5
- ○ 6
- ○ 7

Submit Answer

Data Structure Quiz

Admin: Saylee
04/18/2018

Start Over

3.In a vector if all names are missing it will return_____?

- ( )
- ( ) NA
- ( ) missing
- (•) NULL

Submit Answer

4.A factor is a _____ that contains _____ values and are built on top of _____ vector?

- (•) vector,predefined,int
- ( ) list,any,number
- ( ) vector,predefined,char

Submit Answer

5.What are the levels of this
`x<-factor(c("x","y","z","z","a"))`

- (•) x,y,z,a
- ( ) x,y,z,z,a
- ( ) 1,2,3,4
- ( ) 4

Submit Answer

6.Dataframe is a list of _____ vectors and they are ____ and shares properties of a _____ and _____?

- (•) equal length,2d,matrix,list
- ( ) equal length,2d,matrix,array
- ( ) unequal length,3d,matrix,list
- ( ) unequal length,3d,matrix,vector

Submit Answer

7.Which of the below are attributes of a matrix?

- (•) dim(),nrow(),ncol()
- ( ) dimnames(),rownames(),colnames()
- ( ) All of above
- ( ) None of the above

Submit Answer

8.The basic data structure in R is a _____ It comes in two parts _____ and _____

- ( ) vector,atomic vector,array
- ( ) atomic vector,vector,list
- (•) vector,atomic vector,list

Submit Answer

9.Numbers in R are treated as _____ precision real numbers.

- single
- double
- real
- all of above

Submit Answer

10.Which of the below is an attribute of an `object` .

- dim
- class
- length
- All of above

Submit Answer

11.x<-6 , Class(x) is _____ ?

- int
- double
- real
- All of above

Submit Answer

Exercise

12.Find the sum of the vector `x` .

Code | Start Over | ▶ Run Code

```
1 x<-c(TRUE,FALSE,TRUE,TRUE)
2 sum(x)
```

13.Convert `x` such that the structure is an integer.

Code | Start Over | ▶ Run Code

```
x<-c(1,2)
x<-as.integer(c(1,2))

```

14.Write a command to name the vector `x` as a,b,c?
Hint: named vector!!

Code | Start Over | ▶ Run Code

```
x<-c(1.2,4.5,6.5)
names(x)<-c("a","b","c")

```

Use this below ouput as a reference to the next exercise –

```
## , , 1
##
##     a b c
## one 1 3 5
## two 2 4 6
##
## , , 2
##
##     a b c
## one 1 3 5
## two 2 4 6
```

15.Write a command which gives a 2 - dimensional array as shown above!

Code | Start Over | ▶ Run Code

```
arr1 <- array(c(1:6), dim = c(2,3))
rownames(arr1)<-c("one","two")
colnames(arr1) <- c("a","b","c")


```

16.Write a command to find the length of the above array?

Code | Start Over | ▶ Run Code

```
dim(arr1)

```

object 'arr1' not found

17.Write a command to get structure of the below data frame converting/keeping 'x' as string/character?

Code | Start Over | ▶ Run Code

```
1 mydf1<-data.frame(x=c("a","b","c"))
2 str(mydf1)
3
```

```
'data.frame':   3 obs. of  1 variable:
 $ x: Factor w/ 3 levels "a","b","c": 1 2 3
```

18.Write a command to extract column `y.2` from the below dataframe?
Note: If you couldn't see the output, take it evaluate in your local R console/script and work from there.

Code | Start Over | ▶ Run Code

```
1 mydf2<-data.frame(x=1:3, y=I(matrix(1:9,nrow=3)))
2 mydf2$y[,2]
3
```

```
[1] 4 5 6
```

19.Write a command to convert the vector `x` (see below code) as "FALSE TRUE TRUE TRUE TRUE TRUE TRUE" ?

Code | Start Over | ▶ Run Code

```
1 x<-0:6
2 as.logical(x)
```

20.Write a command to convert the vector `x` as "0","1","2","3","4","5","6" ?

Code | Start Over | ▶ Run Code

```
1 x<-0:6
2 as.factor(x)
3
```

```
[1] 0 1 2 3 4 5 6
Levels: 0 1 2 3 4 5 6
```