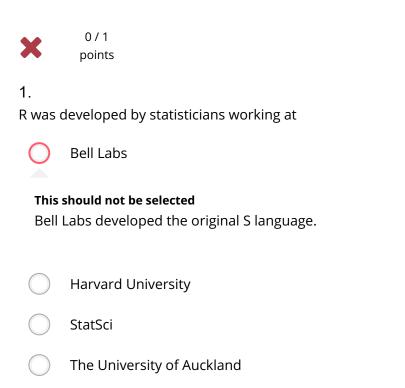
17/20 points (85%)

Quiz, 20 questions

✓ Congratulations! You passed!

Next Item

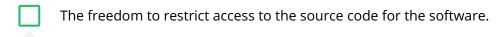




0/1 points

2.

The definition of free software consists of four freedoms (freedoms 0 through 3). Which of the following is NOT one of the freedoms that are part of the definition? Select all that apply.



Correct

This is not part of the free software definition. Freedoms 1 and 3 require access to the source code.

Quiz, 20 questions

	Coursera Online Courses From Top Universities. Join for Free Coursera The freedom to redistribute copies so you can help your neighbor.	
	should not be selected	17/20 points (85%)
INIS	is freedom 2.	
	The freedom to study how the program works, and adapt it to your needs.	
Un-se	elected is correct	

Un-selected is correct

The freedom to sell the software for any price.

The freedom to run the program, for any purpose.

Correct

This is not part of the free software definition. The free software definition does not mention anything about selling software (although it does not disallow it).

The freedom to improve the program, and release your improvements to the public, so that the whole community benefits.

Un-selected is correct

The freedom to prevent users from using the software for undesirable purposes.

This should be selected



0/1

points

3.

In R the following are all atomic data types EXCEPT: (Select all that apply)

3/1/2018 data frame Week 1 Quiz This should be selected Quiz, 20 questions complex **Un-selected is correct** table This should be selected list This should be selected character **Un-selected is correct** matrix This should be selected numeric **Un-selected is correct** array

17/20 points (85%)

Correct

'array' is not an atomic data type in R.

logical

Un-selected is correct

Week 1 Quiz Quiz, 20 questions	Z integer	17/20 points (85%)
,	Un-selected is correct	
		_
	1 / 1 points	
	4. If I execute the expression $x <- 4$ in R, what is the class of the object `x' as determined by the `class()' function?	
	integer	
	list	
	matrix	
	complex	
	numeric	
	Correct	
	real	
	vector	
	1 / 1 points	
	5. What is the class of the object defined by the expression x <- c(4, "a", TRUE)?	
	logical	
	character	
	Correct	

The character class is the "lowest common denominator" here and so all elements will be coerced into that class.

Week 1 Quiz

17/20 points (85%)

Quiz, 20	questions
----------	-----------

	mixed
	numeric
	integer
~	1 / 1 points
	e two vectors $x <- c(1,3,5)$ and $y <- c(3,2,10)$, what is produced by the sion rbind(x , y)?
	a vector of length 2
	a 3 by 3 matrix
	a vector of length 3
	a 2 by 2 matrix
	a 3 by 2 matrix
0	a matrix with two rows and three columns
then	ect 'rbind' function treats vectors as if they were rows of a matrix. It takes those vectors and binds them together row-wise to create atrix.
~	1 / 1 points
7. A key p	property of vectors in R is that
	elements of a vector can only be character or numeric

		elements of a vector can be of different classes	
Week 1 Quiz		the length of a vector must be less than 32,768	17/20 points (85%)
Quiz, 20 questions	0	elements of a vector all must be of the same class	
	Corre	ect	
		a vector cannot have have attributes like dimensions	
	~	1 / 1 points	
		se I have a list defined as x <- list(2, "a", "b", TRUE). What does x[[1]] e? Select all that apply.	
		a numeric vector of length 1.	
	Corre	ect	
		a list containing a numeric vector of length 1.	
	Un-se	elected is correct	
		a character vector containing the element "2".	
	Un-se	elected is correct	
		a list containing the number 2.	
	Un-se	elected is correct	
		a numeric vector containing the element 2.	
	Corre	ect	

1/1 points

17/20 points (85%)

Quiz, 20 questions

9.

Suppose I have a vector x <- 1:4 and a vector y <- 2. What is produced by the expression x + y?

0

a numeric vector with elements 3, 4, 5, 6.

Correct

- (a pumoric voctor with alamonts	2	2	2	6
١	a numeric vector with elements :	ο,	۷,	Э,	O.

- a numeric vector with elements 3, 2, 3, 4.
- an integer vector with elements 3, 2, 3, 6.
- an integer vector with elements 3, 2, 3, 4.
- a numeric vector with elements 1, 2, 3, 6.



1/1 points

10.

Suppose I have a vector x <- c(3, 5, 1, 10, 12, 6) and I want to set all elements of this vector that are less than 6 to be equal to zero. What R code achieves this? Select all that apply.



$$x[x > 0] < -6$$

Un-selected is correct



$$x[x == 0] < 6$$

Un-selected is correct



Un-selected is correct

x[x >= 6] <- 0

Week 1 Quiz

Un-selected is correct

17/20 points (85%)

Quiz, 20 questions

x[x == 6] <- 0

Un-selected is correct

x[x < 6] < 0

Correct

You can create a logical vector with the expression x < 6 and then use the [operator to subset the original vector x.

x[x > 6] <- 0

Un-selected is correct

x[x %in% 1:5] <- 0

Correct

You can create a logical vector with the expression x %in% 1:5 and then use the [operator to subset the original vector x.

x[x < 6] == 0

Un-selected is correct

x[x <= 5] <- 0

Correct

You can create a logical vector with the expression $x \le 5$ and then use the [operator to subset the original vector x.



x[x == 0] < -6

Un-selected is correct

Week 1 Quiz 17/20 points (85%)

Quiz, 20 questions



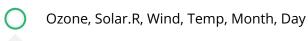
1/1 points

11.

Use the Week 1 Quiz Data Set to answer questions 11-20.

In the dataset provided for this Quiz, what are the column names of the dataset?

Month, Day, Temp, Wind



Correct

You can get the column names of a data frame with the `names()' function.

1, 2, 3, 4, 5, 6

Ozone, Solar.R, Wind



1/1

points

12.

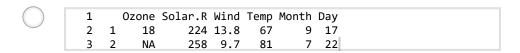
Extract the first 2 rows of the data frame and print them to the console. What does the output look like?



1		Ozone	Solar.R	Wind	Temp	Month	Day
2	1	41	190	7.4	67	5	1
3	2	36	118	8.0	72	5	2

Correct

You can extract the first two rows using the [operator and an integer sequence to index the rows.





Quiz, 20 questions

1		0zone	Solar.R	Wind	Temp	Month	Day
2	1	9	24	10.9	71	9	14
3	2	18	131	8.0	76	9	29

17/20 points (85%)

1		0zone	Solar.R	Wind	Temp	Month	Day
2	1	7	NA	6.9	74	5	11
3	2	35	274	10.3	82	7	17



1/1 points

13.

How many observations (i.e. rows) are in this data frame?

45

129

153

Correct

You can use the `nrows()' function to compute the number of rows in a data frame.

160



1/1 points

14.

Extract the *last* 2 rows of the data frame and print them to the console. What does the output look like?

1		0zone	Solar.R	Wind	Temp	Month	Day
2	152	11	44	9.7	62	5	20
3	153	108	223	8.0	85	7	25

1		0zone	Solar.R	Wind	Temp	Month	Day
2	152	31	244	10.9	78	8	19
3	153	29	127	9.7	82	6	7

1		0zone	Solar.R	Wind	Temp	Month	Day
			307				-
3	153	13	27	10.3	76	9	18



1		Ozone	Solar.R	Wind	Temp	Month	Day
2	152	18	131	8.0	76	9	29
3	153	20	223	11.5	68	9	30

17/20 points (85%)

Quiz, 20 questions

Correct

The `tail()' function is an easy way to extract the last few elements of an R object.

~	1 / 1 points
15 . What is	s the value of Ozone in the 47th row?
	18
	63
	34
_	

Correct

21

The single bracket [operator can be used to extract individual rows of a data frame.



1/1 points

16.

How many missing values are in the Ozone column of this data frame?

	43
	9
	78
0	37

Correct

The `is.na' function can be used to test for missing values.

Week 1 Qui	Z	17/20 points (85%)
Quiz, 20 questions		_
	1/1 points	
	17. What is the mean of the Ozone column in this dataset? Exclude missing values (coded as NA) from this calculation.	
	53.2	
	31.5	
	42.1	
	Correct The `mean' function can be used to calculate the mean.	
	18.0	
	1/1 points	
	18.Extract the subset of rows of the data frame where Ozone values are above31 and Temp values are above 90. What is the mean of Solar.R in this subset	?
	205.0	
	334.0	
	212.8	
	Correct You need to construct a logical vector in R to match the question's requirements. Then use that logical vector to subset the data frame.	
	185.9	

Week 1 Quiz	Z	points 1	7/20 points (85%)
Quiz, 20 questions	19. What is	,	
		85.6	
		75.3	
	0	79.1	
	Corre		
		90.2	-
	2 0.	1 / 1 points	
	What v to 5)?	vas the maximum ozone value in the month of May (i.e. Month is equal	
	0	115	
	Corre		
		97	
		100	
		18	



Week 1 Quiz 17/20 points (85%)

Quiz, 20 questions