Congratulations! You passed!	Next Item
1/1 points	
1. R was developed by statisticians working at	
StatSci	
The University of Auckland	
Correct The R language was developed by Ross Ihaka and Robert Gentleman who statisticians at the University of Auckland in New Zealand.	o were
Bell Labs Harvard University	
1/1 points	
2. The definition of free software consists of four freedoms (freedoms 0 through following is NOT one of the freedoms that are part of the definition? Select	_
The freedom to sell the software for any price.	
Correct This is not part of the free software definition. The free software definition mention anything about selling software (although it does not disallow it	
The freedom to study how the program works, and adapt it to your	needs.
	1. R was developed by statisticians working at StatSci The University of Auckland Correct The R language was developed by Ross Ihaka and Robert Gentleman wh statisticians at the University of Auckland in New Zealand. Bell Labs Harvard University 1/1 points 2. The definition of free software consists of four freedoms (freedoms 0 throuf following is NOT one of the freedoms that are part of the definition? Select The freedom to sell the software for any price. Correct This is not part of the free software definition. The free software definition anything about selling software (although it does not disallow it

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

Correct

This is not part of the free software definition. Freedom 0 requires that the users of fixed $vist$ tware be free to use the software for any purpose.	ree 20/20 points (100%)
Quiz, 20 questions	
The freedom to improve the program, and release your improvements to the p so that the whole community benefits.	ublic,
Un-selected is correct	
The freedom to redistribute copies so you can help your neighbor.	
Un-selected is correct	
The freedom to run the program, for any purpose.	
Un-selected is correct	
The freedom to restrict access to the source code for the software.	
Correct This is not part of the free software definition. Freedoms 1 and 3 require access to the	ie
source code.	
1/1	
points	
3.	
In R the following are all atomic data types EXCEPT: (Select all that apply)	
integer	
Un-selected is correct	
on science is correct	
table	
table	
Correct	
'table' is not an atomic data type in R.	
character	
Un colored in course	
Un-selected is correct	

list

Week 1 Quiz

20/20 points (100%)

Quiz, 20 questions list' is not an atomic data type in R.

matrix Correct 'matrix' is not an atomic data type in R.
Correct 'array' is not an atomic data type in R.
numeric Un-selected is correct
logical Un-selected is correct
Complex Un-selected is correct
data frame Correct 'data frame' is not an atomic data type in R.
1/1 points
1. f I execute the expression x <- 4L in R, what is the class of the object `x' as determined by the class()' function?
logical character

	numeric												
Week 1 Quiz	Z complex	20/20 points (100%)											
Quiz, 20 questions	matrix												
0	integer												
Co	Correct												
Th	e 'L' suffix creates an integer vector as opposed to a numeric vector.												
	4.74												
~	1 / 1 points												
5.	tie the class of the object defined by the expression $y \in \mathcal{C}(A, \mathbb{T}^n)$ TDLIFY?												
vvnau	t is the class of the object defined by the expression x <- c(4, "a", TRUE)?												
	logical												
O	character												
Th	rrect e character class is the "lowest common denominator" here and so all elements w coerced into that class.	ill											
	numeric												
	integer												
	mixed												
	1/1												
	points												
6. If I ha y)?	ave two vectors $x <- c(1,3,5)$ and $y <- c(3,2,10)$, what is produced by the expression	ı rbind(x,											
	a 3 by 3 matrix												
	a 2 by 2 matrix												
	a vector of length 2												
	a 3 by 2 matrix												
	a vector of length 3												
\bigcirc													

a matrix with two rows and three columns

Week 1 Quiz

20/20 points (100%)

Quiz, 20 questions The 'rbind' function treats vectors as if they were rows of a matrix. It then takes those vectors and binds them together row-wise to create a matrix.

~	1 / 1 points
7.	
A key p	property of vectors in R is that
	elements of a vector can be of different classes
0	elements of a vector all must be of the same class
Corr	ect
	elements of a vector can only be character or numeric
	the length of a vector must be less than 32,768
	a vector cannot have have attributes like dimensions
~	1 / 1 points
8 . Suppo that ap	se I have a list defined as $x <$ - list(2, "a", "b", TRUE). What does $x[[2]]$ give me? Select all oply.
	a character vector containing the letter "a".
Corr	ect
	a list containing a character vector with the elements "a" and "b".
Un-s	elected is correct
	a character vector with the elements "a" and "b".
Un-s	elected is correct
	a list containing character vector with the letter "a".

Un-selected is correct

***			\sim	•
۱۸/	eek	1	()	1117
٧V	CCV	1	v	սւ֊

20/20 points (100%)

Quiz, 20 questions

a character vector of length 1.

Correct



1/1 points

9.

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

- a numeric vector with elements 3, 2, 3, 4.
- a numeric vector with elements 1, 2, 3, 6.
- an integer vector with elements 3, 2, 3, 6.
- an integer vector with elements 3, 2, 3, 4.
- a numeric vector with elements 3, 4, 5, 6.

Correct

a numeric vector with elements 3, 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.



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

Un-selected is correct



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

Un-selected is correct



$$x[x \le 5] < 0$$

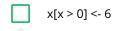
Correct

Week 1 $Qu'izu$ can create a logical vector with the expression x <= 5 and then use the [op-	erator to 20/20 points (100%)
subset the original vector x.	20/20 points (100/0)

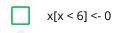
Quiz, 20 questions

x[x > 6] <- 0

Un-selected is correct

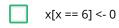


Un-selected is correct



Correct

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



Un-selected is correct

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 == 0] < 6

Un-selected is correct

x[x == 0] <- 6

Un-selected is correct



20/20 points (100%)

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

In the	dataset	prov	ided	for this	. Quiz	, wha	at are t	the o	e column names of the dataset?
	Month	n, Day	/, Tei	mp, Wir	nd				
	1, 2, 3,	, 4, 5,	6						
	Ozone	e, Sola	ar.R,	Wind					
0	Ozone	e, Sol	ar.R,	Wind, T	emp	, Mor	nth, Da	ıy	
Corr You		the o	colur	mn nam	ies of	ā da	ta frar	ne v	with the `names()' function.
~	1 / poin								
12.									
Extract look lik		st 2 ro	ows (of the d	ata fı	ame	and p	rint	it them to the console. What does the outpu
	1 2 3	0z 1 2	one : 9 18	Solar.R 24 131	Wind 10.9 8.0	Temp 71 76	Month 9	14	.4
	1 2 3	0z 1 2	one : 18 NA	Solar.R 224 258	Wind 13.8 9.7	Temp 67 81	Month 9 7	17	.7
0	1 2 3	0z 1 2	one : 41 36	Solar.R 190 118	Wind 7.4 8.0	Temp 67 72	Month 5 5	1	
Corr	ect								
	can ext ex the ro		ne fi	rst two	rows	usin	g tne [. ope	perator and an integer sequence to
	1 2	0z	one :	Solar.R	Wind 6.9	Temp		Day 11	
	3	2	35		10.3	82	7		



1/1 points

13.

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

160

Week 1 Quiz

20/20 points (100%)



Correct

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

129



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	18	131	8.0	76	9	29
3	153	20	223	11.5	68	9	30

Correct

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

1		Ozone	Solar.R	Wind	Temn	Month	Day
		020110	JOIGI . IX	WIIIG	i Cilip	110111111	Duy
2	152	11	44	9.7	62	5	20
2	153	108	223	8 0	25	7	25
	LJJ	100	223	0.0	ره		23

1		Ozone	Solar.R	Wind	Temp	Month	Day
2	152	34	307	12.0	66	5	17
3	153	13	27	10.3	76	9	18

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



1/1 points

What is the value of Ozone in the 47th row?



21

Correct

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

34

18

_		
Week 1	Ouiz	63

20/20 points (100%)

Quiz, 20 questions



1/1 points

16.

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



37

Correct

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

- 9
- 43
- 78



1/1 points

17.

What is the mean of the Ozone column in this dataset? Exclude missing values (coded as NA) from this calculation.



42.1

Correct

The `mean' function can be used to calculate the mean.

- 31.5
- 53.2
- 18.0



1/1 points

18.

Extract the subset of rows of the data frame where Ozone values are above 31 and Temp values are above 90. What is the mean of Solar.R in this subset?



212.8

TT71.	\circ .
MPPR 1	Quiz
44 CC17 1	. Quiz .

20/20 points (100%)

Quiz, 20 questions ou need to construct a logical vector in R to match the question's requirements. Then use that logical vector to subset the data frame.

	205.0				
	185.9				
	334.0				
~	1 / 1 points				
19. What i	s the mean of "Temp" when "Month" is equal to 6?				
	90.2				
0	79.1				
Correct					
	85.6				
	75.3				
~	1 / 1 points				
20. What v	vas the maximum ozone value in the month of May (i.e. Month is equal to 5)?				
	97				
0	115				
Correct					
	100				
	18				