Feedback — Week 2 Quiz

Help Center

Thank you. Your submission for this quiz was received.

You submitted this quiz on **Sat 19 Sep 2015 7:30 AM PDT**. You got a score of **7.00** out of **10.00**. You can attempt again, if you'd like.

Question 1

Suppose I define the following function in R

```
cube <- function(x, n) {
          x^3
}</pre>
```

What is the result of running

cube(3)

in R after defining this function?

	Score	Explanation
~	1.00	Because 'n' is not evaluated, it is not needed even though it is a formal argument.
	1.00 /	
	•	✓ 1.00

Question 2

```
The following code will produce a warning in R.
 x <- 1:10
 if(x > 5) {
         x <- 0
  }
Why?
 Your Answer
                                                                        Score
                                                                                     Explanation
 O There are no elements in 'x' that are greater than 5
 ○ 'x' is a vector of length 10 and 'if' can only test a single logical
 statement.
 You cannot set 'x' to be 0 because 'x' is a vector and 0 is a
                                                                    × 0.00
 scalar.
 • The syntax of this R expression is incorrect.

    The expression uses curly braces.

 Total
                                                                        0.00 /
                                                                        1.00
```

Question 3

Consider the following function

```
f <- function(x) {
          g <- function(y) {
               y + z
          }
          z <- 4
          x + g(x)
}</pre>
```

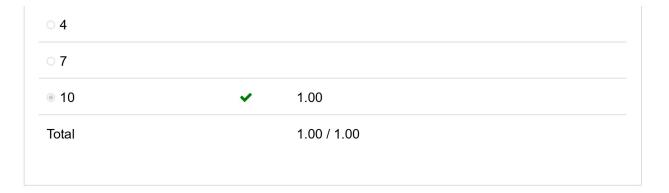
If I then run in R

```
z <- 10
f(3)
```

What value is returned?

Your Answer	Score	Explanation

ି 16



Question 4

Consider the following expression:

```
x <- 5
y <- if(x < 3) {
         NA
} else {
         10
}</pre>
```

What is the value of 'y' after evaluating this expression?

Your Answer		Score	Explanation
O 5			
○ NA			
○ 3			
10	~	1.00	
Total		1.00 / 1.00	

Question 5

Consider the following R function

```
h <- function(x, y = NULL, d = 3L) {
    z <- cbind(x, d)
    if(!is.null(y))
        z <- z + y
    else
        z <- z + f
    g <- x + y / z</pre>
```

3 von 7 19.09.2015 16:32

Which symbol in the above function is a free variable?

Your Answer		Score	Explanation
	~	1.00	
○ z			
\circ d			
○ L			
o g			
Total		1.00 / 1.00	

Question 6

What is an environment in R?

Your Answer	Score	Explanation
a collection of symbol/value pairs		
a list whose elements are all functions		
o an R package that only contains data		
a special type of function		
Total	0.00 / 1.00	

Question 7

The R language uses what type of scoping rule for resolving free variables?

Your Answer Score Explanation

dynamic scoping

4 von 7 19.09.2015 16:32

lexical scoping	~	1.00
ocompilation scoping		
global scoping		
Total		1.00 / 1.00

	Score	Explanation
×	0.00	
	0.00 /	
	×	× 0.00

Question 9				
What is one of the consequences of the scoping rules used in R?				
Your Answer		Score	Explanation	
R objects cannot be larger than 100 MB				
• All objects must be stored in memory	~	1.00		
All objects can be stored on the disk				
○ Functions cannot be nested				

6 von 7 19.09.2015 16:32