Ryan Tillis - R Programming - Data Science - Quiz 4 - Coursera

Ryan Tillis

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R Programming Quiz 4

This is Quiz 3 from the R Programming course within the Data Science Specialization.

Questions

1. What is produced at the end of this snippet of R code?

```
set.seed(1)
rpois(5, 2)

## [1] 1 1 2 4 1
```

• A vector with the numbers 1, 1, 2, 4, 1

```
set.seed(1)
rpois(5, 2)

## [1] 1 1 2 4 1
```

- ${\bf 2.} \ \ {\bf What R function \ can \ be \ used \ to \ generate \ standard \ Normal \ random \ variables?}$
 - rnorm

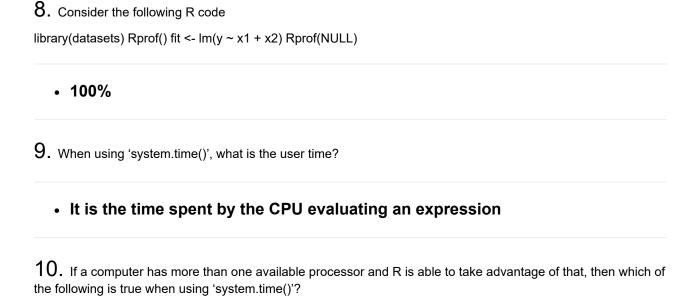
```
rnorm(10, 0, 1)

## [1] 1.272429321 0.414641434 -1.539950042 -0.928567035 -0.294720447

## [6] -0.005767173 2.404653389 0.763593461 -0.799009249 -1.147657009
```

3. When simulating data, why is using the set.seed() function important? Select all that apply.

 It ensures that the sequence of random numbers starts in a specific place and is therefore reproducible.
Explanation:
Set.seed allows other to get the same psuedorandom sequence to verify results.
set.seed(22)
4. Which function can be used to evaluate the inverse cumulative distribution function for the Poisson distribution?
• qpois
Explanation:
See documentation ?qpois
5. What does the following code do?
set.seed(10) x <- rep(0:1, each = 5)
e <- rnorm(10, 0, 20) y <- 0.5 + 2 * x + e
Generate data from a Normal linear model
6. What R function can be used to generate Binomial random variables?
• rbinom
7. What aspect of the R runtime does the profiler keep track of when an R expression is evaluated?
the function call stack



· Elapsed time may be smaller than user time

Check out my website at: http://www.ryantillis.com/