Sri Lanka Institute of Information Technology

Lab Submission

07

**IT24102798**

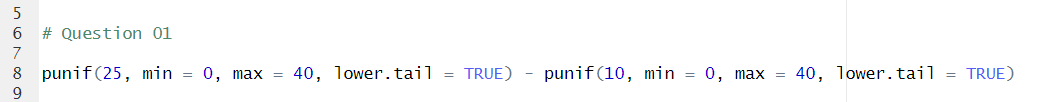
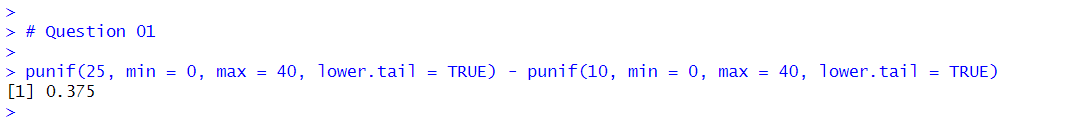
**Sooriyabandara U.R.G.W.K.**

**Probability and Statistics | IT2120**

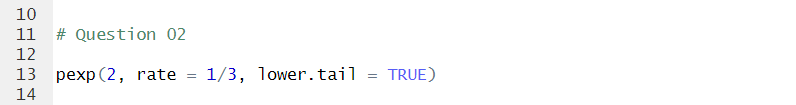
B.Sc. (Hons) in Information Technology

**Exercise**

1. A train arrives at a station uniformly between 8:00 a.m. and 8:40 a.m. Let the random variable X represent the number of minutes the train arrives after 8:00 a.m. What is the probability that the train arrives between 8:10 a.m. and 8:25 a.m.?

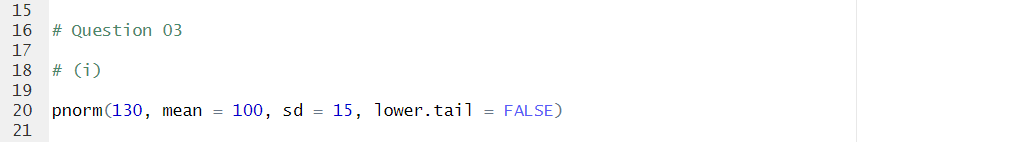
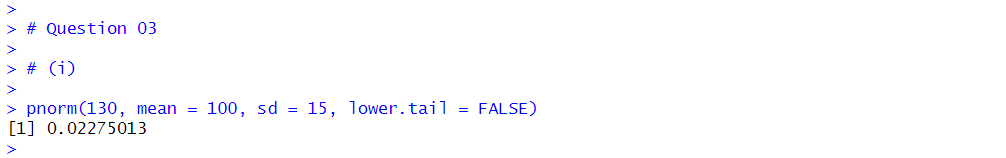


1. The time (in hours) to complete a software update is exponentially distributed with rate λ = 1 3 . Find the probability that an update will take at most 2 hours.

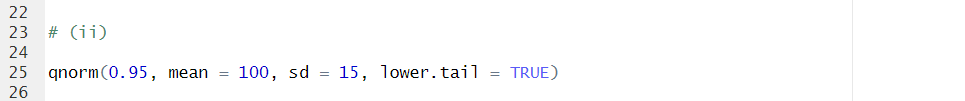




1. Suppose IQ scores are normally distributed with a mean of 100 and a standard deviation of 15.
2. What is the probability that a randomly selected person has an IQ above 130?



1. What IQ score represents the 95th percentile?



A close up of a text

AI-generated content may be incorrect.