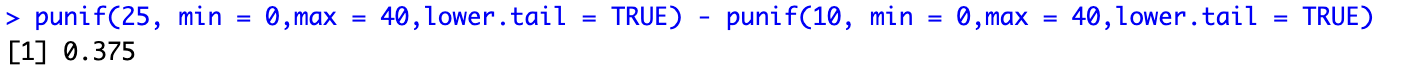
PS Lab Sheet – 7 IT24100862  
  
1. A train arrives at a station uniformly between 8:00 a.m. and 8:40 a.m. Let the random variable X represent the number of minutes the train arrives after 8:00 a.m. What is the probability that the train arrives between 8:10 a.m. and 8:25 a.m.?



2. The time (in hours) to complete a software update is exponentially distributed with rate λ=

Find the probability that an update will take at most 2 hours. 

3.Suppose IQ scores are normally distributed with a mean of 100 and a standard

deviation of 15.

i. What is the probability that a randomly selected person has an IQ

above 130?

ii. What IQ score represents the 95th percentile?

