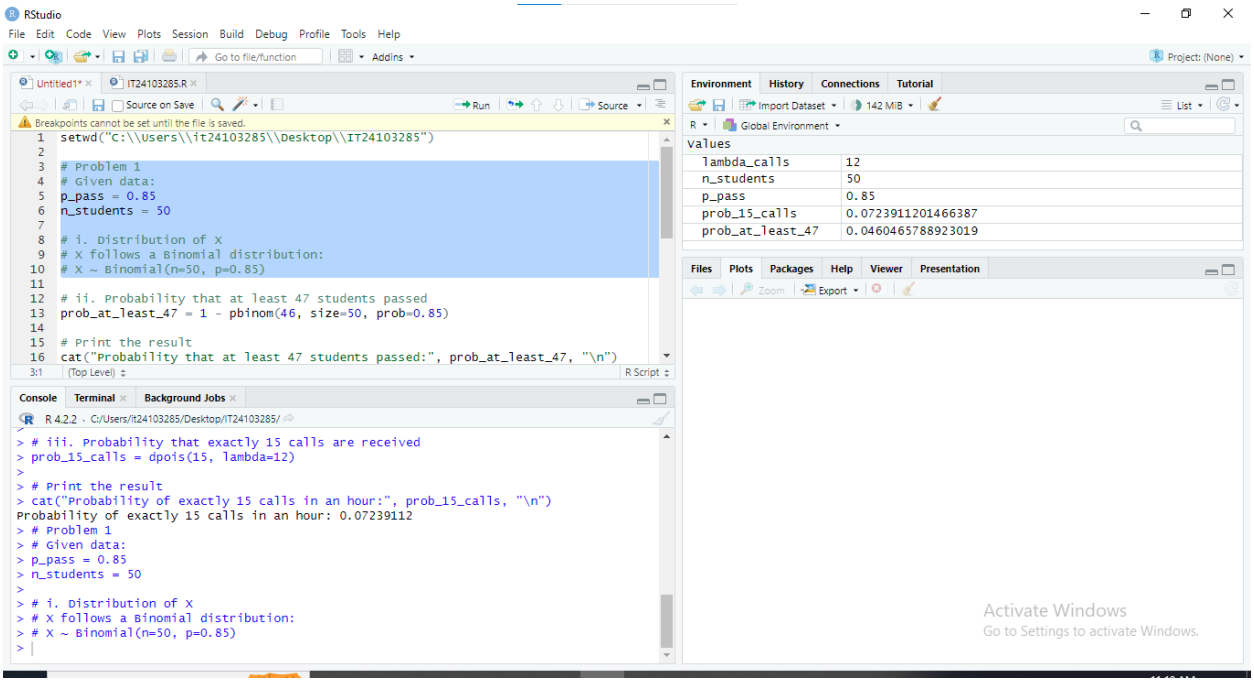
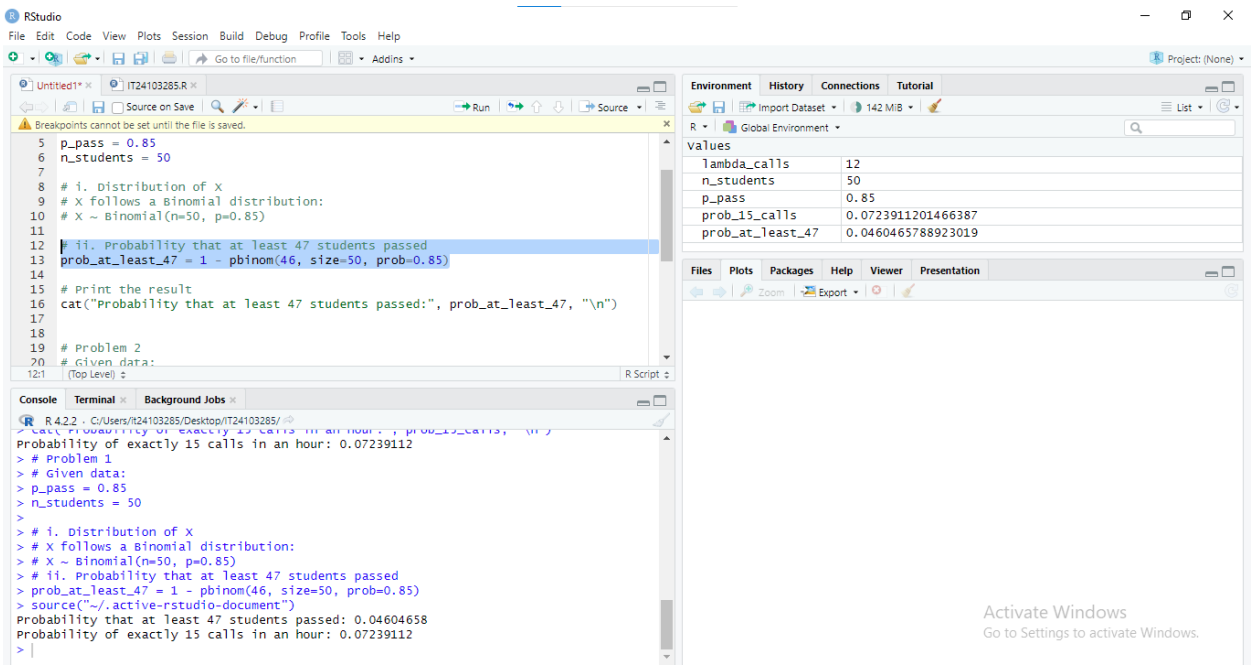
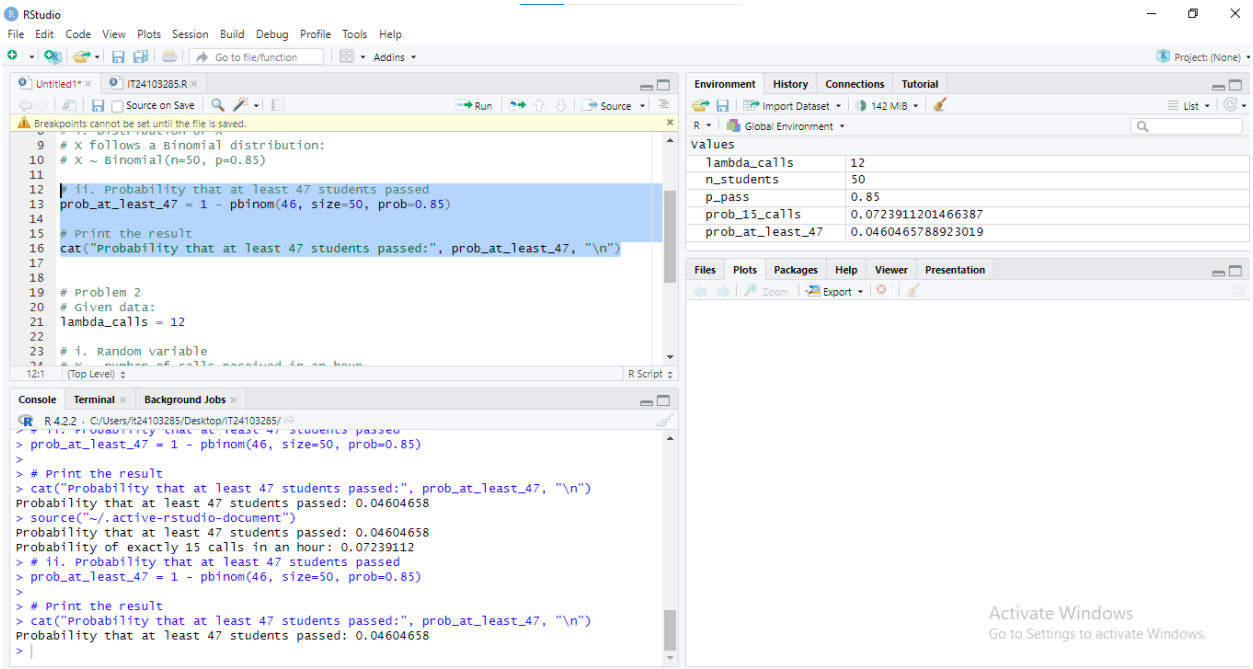
Dilhara R.M.S.

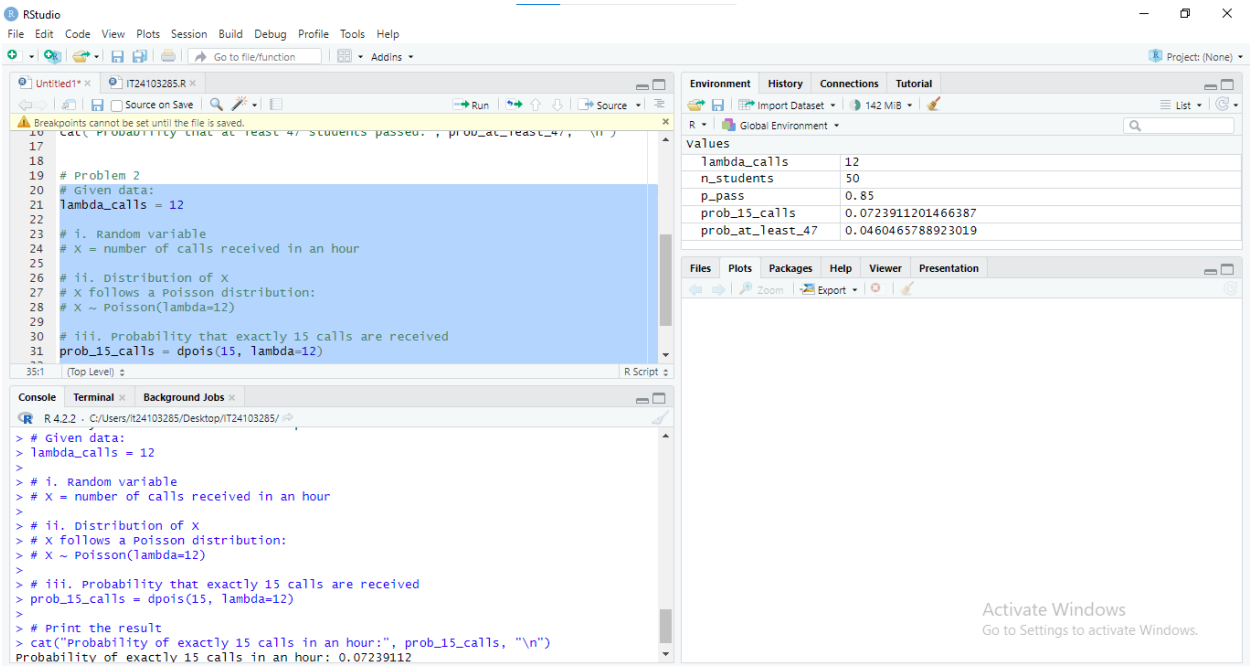
IT24103285

Lab Sheet 06






RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Untitled1* IT24103285.R
# X follows a Binomial distribution:
# X ~ Binomial(n=50, p=0.85)
# ii. Probability that at least 47 students passed
prob_at_least_47 = 1 - pbinom(46, size=50, prob=0.85)
# Print the result
cat("Probability that at least 47 students passed:", prob_at_least_47, "\n")
# Problem 2
# Given data:
lambda_calls = 12
# i. Random variable
Breakpoints cannot be set until the file is saved.
Environment History Connections Tutorial
Import Dataset 142 MiB
Global Environment
values
lambda_calls 12
n_students 50
p_pass 0.85
prob_15_calls 0.0723911201466387
prob_at_least_47 0.0460465788923019
Files Plots Packages Help Viewer Presentation
Export
Console Terminal Background Jobs
R 4.2.2 · C:/Users/it24103285/Desktop/IT24103285/
> prob_at_least_47 = 1 - pbinom(46, size=50, prob=0.85)
> # Print the result
> cat("Probability that at least 47 students passed:", prob_at_least_47, "\n")
Probability that at least 47 students passed: 0.04604658
> source("~/.active-rstudio-document")
Probability that at least 47 students passed: 0.04604658
Probability of exactly 15 calls in an hour: 0.07239112
> # ii. Probability that at least 47 students passed
> prob_at_least_47 = 1 - pbinom(46, size=50, prob=0.85)
> # Print the result
> cat("Probability that at least 47 students passed:", prob_at_least_47, "\n")
Probability that at least 47 students passed: 0.04604658
Activate Windows
Go to Settings to activate Windows.


RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Untitled1* IT24103285.R
# Problem 2
# Given data:
lambda_calls = 12
# i. Random variable
# X = number of calls received in an hour
# ii. Distribution of X
# X follows a Poisson distribution:
# X ~ Poisson(lambda=12)
# iii. Probability that exactly 15 calls are received
prob_15_calls = dpois(15, lambda=12)
Breakpoints cannot be set until the file is saved.
Environment History Connections Tutorial
Import Dataset 142 MiB
Global Environment
values
lambda_calls 12
n_students 50
p_pass 0.85
prob_15_calls 0.0723911201466387
prob_at_least_47 0.0460465788923019
Files Plots Packages Help Viewer Presentation
Export
Console Terminal Background Jobs
R 4.2.2 · C:/Users/it24103285/Desktop/IT24103285/
> # Given data:
> lambda_calls = 12
> # i. Random variable
> # X = number of calls received in an hour
> # ii. Distribution of X
> # X follows a Poisson distribution:
> # X ~ Poisson(lambda=12)
> # iii. Probability that exactly 15 calls are received
> prob_15_calls = dpois(15, lambda=12)
> # Print the result
> cat("Probability of exactly 15 calls in an hour:", prob_15_calls, "\n")
Probability of exactly 15 calls in an hour: 0.07239112
Activate Windows
Go to Settings to activate Windows.