
Mathematical Foundations of Bioinformatics

R Programming 4

Sajede Bahonar
Behnaz Hoseyni
Hesam Montazeri
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Problem 1: Programming: TCGA datasets

Download the MAF files for the following TCGA projects ACC, SARC, BRCA using the TCGABiolinks package in R.

- (a) Save all datasets as RData files in the separate folders and files.
- (b) Use the maftools package to plot three plots of your choice and save the figures (in PDF and PNG) in a neat folder structure.
- (c) Make yourself familiar with the R Markdown and generate a short report using the generated PDFs in the previous step.

Problem 2: Universality of the uniform

Regenerate Figures 5.7 and 5.8 of the textbook in R.

Studying any online solution, no matter to what extent, or discussing with others are strictly forbidden and are considered as a violation of the **academic honor code**. Submit your solutions by Nov 26, 2021 (Azar 5, 1400).