



Course: Introduction to Bioinformatics
University: Sharif University of Technology
Semester: Fall 2022

Project Phase TWO

Tasks for Phase 2:

1. Identify genes with the highest correlation to the disease, considering the results from Phase 1.
 - Create a table of genes significantly **overexpressed** in diseased samples compared to healthy ones ($p\text{-value} < 0.05$).
 - Create another table for genes significantly **underexpressed** in diseased samples.
 2. Perform **gene ontology (GO)** and **pathway analysis** for the identified genes.
 - Use online tools like **Enricher** to analyze and report results.
 3. Investigate the literature for AML-related pathways or ontology results.
 - Report on at least three connections between your findings and AML.
 - Identify at least two drugs proposed in the literature for treating AML and explain how they relate to your findings.
-

Deliverables for Phase 2:

1. All written code.
2. A report summarizing the findings, including tables, graphs, and analyses.