Information Technology University, Lahore, Pakistan

BS Computer and Software Engineering

Computer Organization and Assembly Language

Quiz# 5, Spring 2025 Tuesday, April 15, 2025

Name:	Roll Number:
Maximum Time Allowed: 20 minutes	Maximum Marks: 10

- 1. Write a complete RISC-V assembly program that
 - (a) Prompts the user to enter one lowercase character.
 - (b) Prompts the user to choose an operation (1: same, 2: uppercase)
 - (c) Performs the selected operation.
 - (d) Displays the character (lowercase or uppercase) and terminates the program.

Note:

- Uses proper labels, assembly directives, and system calls for I/O.
- The starter code is shown below. You just need to write down the missing code.
- Use branch instructions to handle different operation choices.

solution:

```
.data
    prompt: .asciz "Enter a lowercase alphabet character: "
    op: .asciz "Choose operation (1: same, 2: uppercase): "
    msg: .asciz "Output: "
    newline: .asciz "\n"
    char: .space 2  # Space for 1 character + null terminator
    op_code: .space 2  # Space for operation choice

.text
.globl main
main:
#Write down your code here.
```