



United International University (UIU)
Dept. of Computer Science & Engineering (CSE)
CSE 2218: Data Structure and Algorithms II Lab
Final Exam (Set-A)

Any examinee found adopting unfair means will be expelled from the trimester/program as per UIU disciplinary rules.

Time: 1 hr 30 min

Section: J

Marks: 25

ID:

Problem 1: Write a program to generate all permutations of a given *string using recursion*. [08]

Input: The only line of input contains a string.

Output: Print all possible permutations of the string.

| Input | Output |
|-------|--|
| ABC | ABC ACB BAC BCA CBA CAB |
| js | js sj |
| w | w |

Problem 2: Write a program that takes X and Y as input and calculates the value of X^Y using *divide and conquer* and prints it.

[08]

| Input | Output |
|-------|---------|
| 3 7 | 2187 |
| 5 9 | 1953125 |
| 1 11 | 1 |