

## Department of Computer Science (New Campus) University of Engineering & Technology, Lahore

Subject: Information Security (6<sup>th</sup> Semester, 2021 Session) Total Marks: 10

Due Date: 27-04-2024 Assignment

CLOs	Questions	Marks
4	Apply Data Encryption Standard (DES) to encrypt and decrypt the given plain text as per the following criteria.	5+5
	<ol> <li>The plain text is: LAHORE IS A BIG CITY</li> <li>Key: Get the first 8 characters of your full name. For example, my full name is Abdul Wahab, the key will be Abdul Wah.</li> <li>Block size: 64 bits</li> <li>Number of Rounds: 2</li> <li>Apply DES key scheduling algorithm to generate 2 round keys.</li> <li>Mode of Operation: Cipher Block Chaining (CBC)</li> </ol> Instructions to upload the project:	
	1. You can use MS Word for this project and then convert it to a PDF file. The name	
	of the PDF file should be your registration number in the format 2021SExxx.	
	2. A link will be shared to upload the PDF file to DropBox.	



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Marks	Questions	CLOs
5+5	Apply Advanced Encryption Standard (AES) to encrypt and decrypt the given plain text as per the following criteria.	4
	1. The plain text is: ISLAMABAD IS THE CAPITAL OF PAKISTAN.	
	<ol> <li>Key: Get the first <u>8 characters</u> of your full name. For example, for the full name Abdul Wahab, the first 8 characters are Abdul Wah. Now append them to MY NAME IS to get the key <b>MY NAME IS A</b>bdul Wah.</li> <li>Block size: 128 bits</li> </ol>	
	4. Number of Rounds: 2	
	<ul><li>5. Apply AES key scheduling algorithm to generate 2 round keys.</li><li>6. Mode of Operation: Cipher Block Chaining (CBC)</li></ul>	
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