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	AIMAN SIDDIQUA - 2K18/MC/008.
	COMPUTER NETWORKS
	MC-308
	ASSIGNMENT - I
(1)	Disadvantages of classful addressing:
	is Wastage of TP Addresses
	The Existence of only three block sizes (class)
	B and C) leads to waste of limited IP address of
	(i) No Flexibility for users
	It a combinant needs 2000 addresses we can
-	assign class B network. But it has 216 addresses.
	So It will lead to wastage of addresses.
	(iii) Movintenance is time consuming. (If me don't
	use Subnetting).
	STATE OF THE PROPERTY OF THE P
(2)	Address of the block = 140.15.89.97/26
1 830	Address of the block = 140.15.89.97/26 Divided into 4 equal blocks
	And the state of t
	No of addresses in block = 232-n n=mask
	= 232-26
	= 26 = 64 1P addresses
	91 \(\Rightarrow\) 01100001,
	01 000000 = 64 01 111 111 - 127
	01 000000 = 64 01 111111 - 127 1staddress of the block book by the block
	,

	: large of Block = 140.15.89.64/26 to 140.15.89.127/26
_	0 1.121/96
	for subblocks we will fix 2 more bits.
	Substack 1: 140.15.89.01000000 to 140.15.89.01001111
	= 140.15.89.64/28 to 140.15.89.79/28
	Subblock 2: 140.15.89.01010000 to 140.15.89.01011111
	= 140.15.89.80/28 to 140.15.89.95/28
	140.13.01.13
	Subblick 3: 140.15.89.01100000 to 140.15.89.01101111
,	= 140.15.89.96/28 to 140.15.89.111/28
	The state of the s
	Subblock 4: 140, 15.89, 01110000 to 140.15.89, 01111111
	140.15.89.112/88 15 140.15.89.127/28
	and the the formation of the first of the constitution of the size
A William	1 Cintrodul 12
3.	FRAGMENTATION OFFSET
	It is a field in the IP header. This field helps the
	destination device to place the fragments in the proper
	sequence to build the original packet.
	It indicates the still starting position of the data in the
	bragment in relation to the start of the data in the
	original backet.
	In the first fragment the offset is 0 as the data in this
	Mala Mala m was sainte pares
	original backet.
	Opprior sucree:
_	

	A L LANGINGHIAN O.				
	Fragment offset her 13 bits. But maximum fragment offset passible = (65535-20)=1 = 65514				
	offset boes	ible = (65535-20)=1 = 63	31-11-10		
	offset possible = (65535-20) = So we need to seale down fragment offset field by 216/213 = 8 which acts as a scaling factor.				
-	hu 216/213	= 8 which acts as a se	caling factor.		
	7 - 1-				
		1.001 4.1			
- 4	Hara way	handshaking technique			
	is a per	ress used in a 101/11 Mi	etwork to make.		
-	11- W d jon	byw the server & dient			
	a conviector	step process			
	15 15 a 100th	2019			
	Went	Parties and the second	Server		
		(seq No = x)	(Mante to the		
			establish a connection		
		(SYN+ ACK) segment (8eg No. = [, ACK = xc+1)	THE RESERVE OF THE PARTY OF THE		
		(SYN+ ACK) SO(ACK→ responds to request.		
		(809 No. = 1, ACI			
		Ack Segment (Ack=y+1)	SYNE -> signifies the seg no. with which it initializes the segment		
	s sugar and	Ack = 4	It minarizes the segment		
		J+1)	Client acknowledges		
i as it	un ilandina de	the state of the second to	response of servert		
	SYN: Syn	chronize sequence	they both establish		
	U	l	a feliable connection,		
		and the second of the second			
(5)	· Socket int	erface is based on UNIX, a	letines a set of		
	System calls	or procedure. The commi	in cohon structure		
	needed in s	such a programming is call	ad a Capitalia		
	· Socket a	the of one and by	KN O PACKER.		
	· Socket acts as an end point: · 2 processes can communicate iff they have a				
	lastich 1-	each end.	They have a		
	SHINKE DE	each end,	U		

	Cocket add				
	· Socket address is a combination of 11 address and				
10st No.					
-	. It is a 48 bit address				
-	200. 23.56.8 69				
- 1	IPaddress Port Number				
_	1.				
	200.23.56.8 69				
	Socket address				
	Society Maries				
5)	Functions of MAC:				
	in Con alli ili				
	is Frame delimiting and recognition.				
	(ii) Addressing of destination station.				
2	(11) Convergance of source- station addressing vila too				
	(M Transportnit data transfer of LLC PDVs of of Equipalent				
	information in the ethernel sublayer.				
	information in the ethernet sublayer.				
	and checking frame check sequences.				
10 P 10 P	(vi) Control of access to the physical transmission medium.				
	raining fail and some some some some some some				
7.	Transport layer fealures are:				
	* Process to Process delivery. To header includes				
	sequices point address which is port address. This				
	layer gets the message to the correct process on the				
	computer unlike Network layer, which gets each				
	packet to the correct computer.				
	And the second second				

* Segmentation & negseembling: A message is divided into legeners each segment (contains sequence municipal which enables this layer in reassembling the message the message of the sequence of the end		
mumber which enables thus layer in reassembling the message * Connection Control: Two types: Commectionless of connection oriented. * Flow Control: In this layer flow control is furformed end to end * Error Control: Performed end to end to ensure complete mussage assives without any error. Forms correction is done through retransmission. (8) (20) 182.270.37.102 (b) 182.270.118.155 (c) 182.270.189.23 All of these IP addresses are invalid. (9) The Internet Group hangement Protocol (IGMP) is a communications protocol used by hours of adjacent routers on Ilv4 networks to establish mutticast group memberships. The IGMP is an integral part of IP mutricast I allows the network to direct multicast fransmissions only to hard that layer		2 - 2000embling: a message :
mumber which enables thus layer in reassembling the message. * Connection Control: Typ types: Connectionless I connection oriented. * Flow Control: In this layer flow control is ferformed end to end * Error Control: Performed end to end to ensure complete mussage assures without any error. Groot correction is done through retransmission. (8) (20 182.270.37.102 (b) 182.270.118.155 (c) 182.270.118.155 (c) 182.270.118.155 (c) 182.270.118.155 (d) 182.270.118.155 (e) 182.270.118.15		* Segmentation & reasons to Contains divide
mumber which enables thus layer in reassembling the message. * Connection Control: Two types: Connectionless of connection oriented. * Flow Control: In this layer flow control is furformed end to end * Error Control: Performed end to end to ensure complete mussage assures without any error. Grover correction is done through retrains mission. (8) (20) 182.270.37.102 (b) 182.270.118.155 (c) 182.270.189.23 All of these IP addresses are invalid. (9) The Internet Group hangement Protocol (IGMP) is a Communications protocol used by hosts & adjacent routing on IPv4 networks to establish multicast group memberships The IGMP is an integral fact of IP multicast & allows the network to direct multicast fransmissions guly to layer that have		into segments each segment comains sequence
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# flow Control: In this layer flow control is furformed end to end # Error Control: Performed end to end to ensure complete mussage arrives without any errors. Goror correction is done through retransmission (8) (20) 182.270.37.102 (b) 182.270.118.155 (c) 182.270.189.23 All of these IP addresses are invalid. (9) The Internet Group hangement Protocol (IGMP) is a Communications protocol used by hosts & adjacent waters on IPV4 networks to establish multicast group memberships. The TGMP is an integral part of IP multicast & allows the network to direct multicast transmissions and to be a fact that have		amanerhian-oriented.
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group memberships. The IGMP is an integral part of IP multicast & allows the network to direct multicast transmissions only to heart that have		Management Protocol (IGMP) is a
group memberships. The IGMP is an integral part of IP multicast & allows the network to direct multicast transmissions entry to least that have		communications protocolused by hosts & adjacent
of IP multicast & allows the network to direct multicast transmissions entry to least that have		routers on IPV4 networks to establish multicast
multicast transmissions only to look to direct		group memberships. The Tank is a street hast
transmyssions and to look that have		of IP multicast I allow the
requested them.		multicast transmission among the network to direct
suguested them.		transmyssions only to look that have
		riguested them.

	Computers & other devices connected to a retwork				
	rule 1911 amen They woant to				
	group a roule that supposed themp				
	the state from delices in and				
	a delices belong to which				
	multicast group.				
10					
	812e 15 8 bytes.				
	The header contains the following four fields:				
	The state of the s				
	* Source Post: The post of the device sending				
	Me data. The field can be set to 2000 if the				
	distination computer doesn't need to reply to the sender				
	* Destination Post: It identifies which part is				
	going to accept the information				
	* length: It is a 16 bit field that specifies the entire length of the UDP packet that includes				
***************************************	the entire length of the UDT packet that includes				
	the header also. * Chicksum: It allows the receiving device to				
_	verify the integrity of the packet header & payload.				
	and the state of t				
	Source Port No (16 Bit) Destination Port No (16 Bit)				
	Total Length (16 Bit) (hecksum (16 Bit)				