IF.06.01 TINF Operating Systems – Free Blocks, Quotas – Exercises.

- (10 %) Free Blocks Management Using a Linked List Consider a file system managing free blocks by using linked lists. The table below shows the final two blocks storing free blocks. Fill the empty tables below to show the changes which occur in the tables after the following scenarios. Highlight the changes using a color pencil.
 - (a) Five new blocks are allocated
 - (b) The block 22 is freed
 - (c) Another 5 blocks are allocated
 - (d) Another block is allocated
 - (e) Another three blocks are allocated
 - (f) Four blocks (23456, 8345345, 56, and 634534) are freed

Block #	17	18		
Next Block	18	0		
	4589	24353		
	43546	98745		
	718	76345		
	345	9877		
	23456	7345		
	8345345	34535		
	634534	154698		
	3478	967		
	56	8657		

	56	8657				<u> </u>	1.11	110
Block #	17	18	Block #	1)	27	Block # Next Block	21,+	0
Next Block	18	0	Next Block	78	01104	Next Block		943115
	9709	29353			29375			94795
	43596	98745		-	38 145			145
	7 17	7635		-	1027			9877
	345	1245			1344			7345
		20025			19533			31235
		T511199			19154			
		967			1017			
		265+		447	gic7	Block #	134544	10
Block #	17	18	Block # Next Block	71	18	Next Block	100	0
Next Block	1800	0000	Next Block		149uc	Treste Broom	18	74245
	45 80	14353			90+45			13 CT48
	7330	13 175			76395			7348
	245	4017			9 877			9877
	37	7245			7-375			7315
		24535			34537			139537
		15491			754618			524
	75,75	467			967			641519
		8651	Comparision		4			ال و

Free Blocks Management — Comparision Given the two memory footprint scenarios
for Free Blocks Management as presented in class. State the condition under which the
linked list approach uses less space than the bitmap approach.

linked list approach uses less space than the bitmap approach.

The Limbed dish in botton If you have only a flow blown hu. x = hu blown

LL Blown = x/255

BM Blown = 127 80

Bytmap in beller if there are More blocks fru 121250 = x

230 918 75

LT if x < 30919495 linked Where deny pay