

# CS240, Spring 2022

## Assignment 5: Question 5

**Q5a)** Compute the failure array for the pattern  $P = \text{ississi}$ .

F[0]	F[1]	F[2]	F[3]	F[4]	F[5]	F[7]
0	0	0	1	2	3	4

**Q5b)** Show how to search for pattern in the text using the KMP algorithm. Indicate in a table such as Table ?? which characters of P were compared with which characters of T.

m	i	s	s	i	s	s	a	u	g	a	m	i	s	m	i	s	s	i	s	s	i	p	p	i	m	i	l	l
x																												
	i	s	s	i	s	s	x																					
				(i)	(s)	(s)	x																					
							x																					
								x																				
									x																			
										x																		
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												i	s	x														
														x														
															i	s	s	i	s	s	i							