Question1 Select **the most suitable option:**

In Merge Sort, how many subarrays are created in each recursive call?

a. 1

b. 2

c. 3

d. Depends on input

Which of the following algorithms has the best worst-case time complexity?

a. Insertion Sort

b. Selection Sort

c. Merge Sort

Question 2: Sort the sequence [10, 7, 1, 217, 25] by hand using Merge sort algorithm (complete the table below)

Original	**10**	**7**	**1**	**217**	**25**			
Divide in 2	**10**	**7**		**1**	**217**	**25**		
Divide in 4	**10**		**7**		**1**		**217**	**25**
Divide in 5	**10**		**7**		**1**		**217**		**25**
Merge 2	**7**	**10**			**1**		**25**	**217**	
Merge	**7**	**10**			**1**	**25**	**217**		
Merge	**1**	**7**	**10**	**25**	**217**				