4 A researcher claims that older people take longer to react to a sudden loud noise than younger people. To investigate this, the researcher randomly selects 6 people over 50 years old and 8 people under 25 years old and records their reaction times, in milliseconds, to a sudden loud noise. The reaction times are as follows.

Over 50	198	212	217	229	235	242		
Under 25	178	181	183	192	203	209	223	231

Carry out a Wilcoxon rank-sum test at the 5% significance level to test the researcher's claim. [8]