0 1 2 3 4 **5** 6 7 **8** **9** **10** 11  
12 23 29 37 42 **55** 61 74 **83** **88** **92** 99

If we look for the value 87 then …

1st mid-point index = (0+11)/2 = 5

2nd mid-point index = (6+11)/2 = 8

3rd mid-point index = (9+11)/2 = 10

4th mid-point index = (9+9)/2 = 9

0 1 2 3 4 **5** **6** 7 **8** 9 10  
12 23 29 37 42 **55** **61** 74 **83** 88 92

If we look for the value 61, then …

1st mid-point index = (0+10)/2 = 5

2nd mid-point index = (6+10)/2 = 8

3rd mid-point index = (6+7)/2 = 6

mid-point index = (first\_index + last\_index)/2