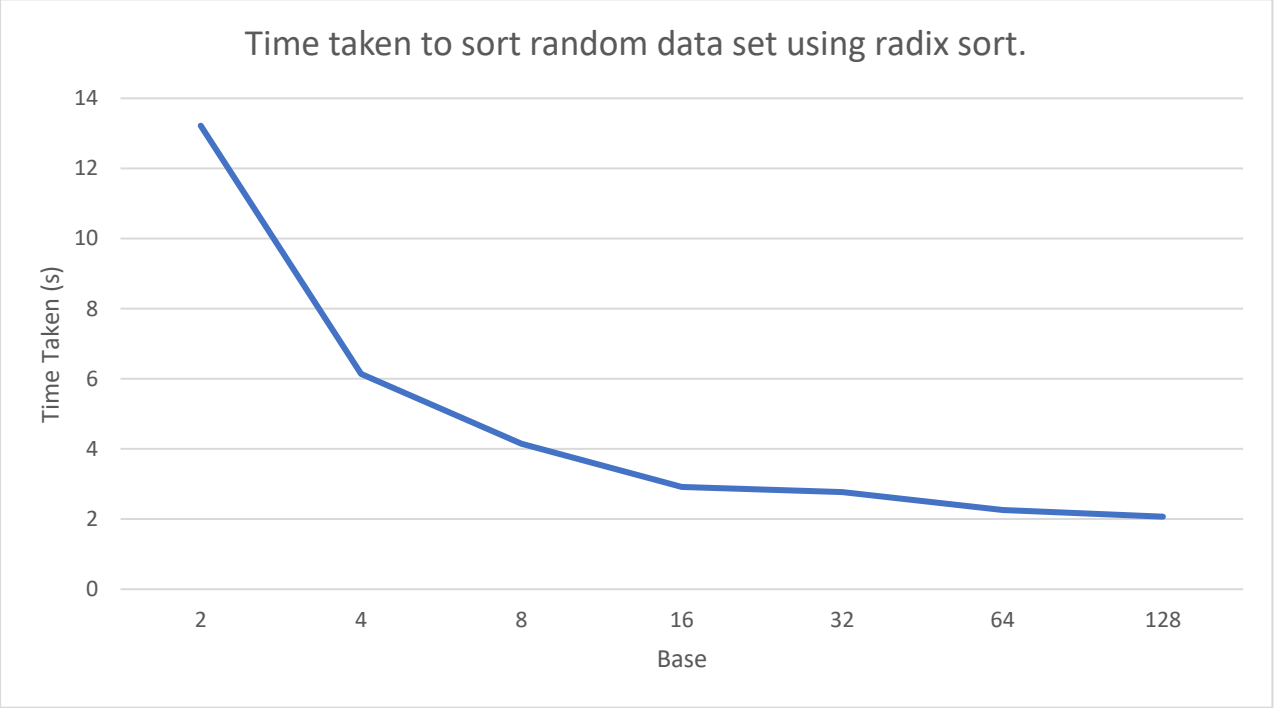
The bases chosen to sort the random data set were bases 2, 4, 8, 16, 32, 64, 128. These bases were chosen as they increase exponentially and as they span across a large range, it should show any patterns that emerge.



Radix sort sorts a list of numbers by sorting each digit from their least significant digit to their most significant digit. This is done through the implementation of counting sort. Large bases would result in a slower counting sort, but there would be less counting sort calls as each call would reduce the number of digits dramatically with larger bases. The opposite is true with smaller bases. Counting sort would be faster, but there would be more counting sort calls as there would be more digits.