

## Assignments - IV

1. Given an unsorted array of size  $n$ . Find the maximum and minimum element using divide-and-conquer.
2. Given two positive integers  $x$  and  $n$ . Compute  $x^n$  using divide-and-conquer.
3. Given two polynomials  $A_x = a_0 + a_1x + a_2x^2 + \dots + a_nx^n$  and  $B_x = b_0 + b_1x + b_2x^2 + \dots + b_nx^n$ . Compute the product  $A_xB_x$  using divide-and-conquer.