

Assignment - 3

Show in the Class on 31 August 2017

First write an algorithm in your notebook and then solve. You need to show your algorithms also.

1. Find maximum of an array of elements without using the Scilab library function.
2. Find the mode of an array if the elements are in sorted order
3. An experiment to calculate Moment of Inertia is being carried out. The formula to be used is

$$MI = \frac{MN}{N+n} \left[\frac{2gh}{\omega^2} - \frac{d^2}{4} \right]$$

and $\omega = 2\pi N/t$

Measurements taken in 5 experiments are given below:

S NO	M (Kg)	h (meters)	N	n	t(sec)
1	0.463	0.32	10	5	4.84
2	0.908	0.32	12	5	3.31
3	0.463	0.21	9	6	3.71
4	0.811	0.29	10	4	3.82
5	0.855	0.25	10	5	3.98

Print MI for all the experiments as a vector.