# P2: PROGRAMS BASED ON ARRAYS BASICS IN JAVA[NCU]

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| **Objective(s):**    To familiarize the students with linear data structure array and its basic operations |
| **Outcome:**    The students will be able to implement and use arrays for solving various problems |
| **Problem Statement:**    1. Write a program that initializes an array with ten random integers and then prints four lines of output, containing:  · Every element at an even index  · Every odd element  · All elements in reverse order  · Only the first and last element |

**Code :**

import java.util.Scanner;

public class Array\_Methods {

static void even\_Elem(int[] arr, int n) {

System.out.println("Elements at Even index =");

for( int i= 0; i< n; i += 2) {

System.out.println(arr[i]);

}

}

static void odd\_Elem(int[] arr, int n){

System.out.println("Elements at odd index =");

for(int i=1 ;i<n ;i+=2) {

System.out.println(arr[i]);

}

}

static void reverse(int[] arr, int n) {

System.out.println("Reversed Array = ");

for(int i=n-1;i>=0;i--) {

System.out.println(arr[i]);

}

}

static void Corner\_Ele(int[] arr, int n) {

System.out.println("The First element is = "+arr[0]);

System.out.println("The Last element is ="+ arr[n-1]);

}

public static void main(String[]args) {

Scanner sc= new Scanner(System.in);

System.out.println("Enter no. of Elements =");

int n = sc.nextInt();

int a[]=new int[n];

for(int i=0;i<n;i++) {

System.out.println("Enter element");

a[i]= sc.nextInt();

}

System.out.println("Elements in the array are=");

for(int i=0;i<n;i++) {

System.out.println( a[i]);

}

int m =a.length;

even\_Elem(a, m);

odd\_Elem(a,m);

reverse(a,m);

Corner\_Ele(a,m);

}

}

Output:

