```
public class Array {
   final int size;  //The maximum capacity of A
   int [] A ;
   int load=0;  //number of elements in A

   Array(int n)
   { size = n;
     A = new int[size];
   }

   //Ex3 a
   void addFirst(int e)
   {



   }
    //Ex3 b
   void addLast(int e)
   {
```

```
}

//Ex3 c
void addAtIndex(int e, int index)
{



}

//Ex4 a
int removeFirst()
{



}

//Ex4 b
 int removeLast()
{
```

```
}

 //Ex4 c
 int removeAtIndex(int index)
{



}

 //Ex5 a
 int  getElementAtIndex(int index)
 {

 }

//Ex5 b
 void  setElementAtIndex(int val, int index)
 {
```

```
 }


void printArray( )
{  for (int i=0; i< load; i++ )
   {  System.out.print(A[i]+" ");
   }
  System.out.println("\nArray load is " +load);
}

public static void main(String [] args)
{
   Array A = new Array(10);

   //Uncomment this section to test Ex3 a
   /*
   A.addFirst(9);
   A.addFirst(1);
```

```
        A.addFirst(4);
        System.out.println("After addFirst 9, 1, and 4 to A");
        System.out.println("Your Answer is");
        A.printArray();
        System.out.println("Correct Answer is\n4 1 9 \nArray
load is 3");
       */

        //Uncomment this section to test Ex3 b
         /*
        System.out.println("---------------------------------");
        A.addLast(2);
        A.addLast(5);
        A.addLast(8);
        System.out.println("After addLast 2, 5, and 8 to A");
        System.out.println("Your Answer is");
        A.printArray();
        System.out.println("Correct Answer is\n4 1 9 2 5 8
\nArray load is 6");
        */
```

```
        //Uncomment this section to test Ex3 c
        /*
        System.out.println("--------------------------------");
        A.addAtIndex(6, 2);
        A.addAtIndex(3, 4);
        System.out.println("After add 6 at index 2, and add 3 at index 4 to A ");
        System.out.println("Your Answer is");
        A.printArray();
        System.out.println("Correct Answer is\n4 1 6 9 3 2 5 8 \nArray load is 8");
        */


        //Uncomment this section to test Ex4 a
        /*
        System.out.println("--------------------------------");
        A.removeFirst();
        A.removeFirst();
        System.out.println("After removeFirst twice ");
        System.out.println("Your Answer is");
        A.printArray();
```

```
        System.out.println("Correct Answer is\n6 9 3 2 5 8
\nArray load is 6");
         */

         //Uncomment this section to test Ex4 b
        /*
        System.out.println("---------------------------------");
        A.removeLast();
        A.removeLast();
        System.out.println("After removeLast twice ");
        System.out.println("Your Answer is");
        A.printArray();
        System.out.println("Correct Answer is\n6 9 3 2 \nArray
load is 4");
         */

         //Uncomment this section to test Ex4 c
        /*
        System.out.println("---------------------------------");
        A.removeAtIndex(1);
        A.removeAtIndex(1);
```

```
        System.out.println("After removeAtIndex 1 twice ");
        System.out.println("Your Answer is");
        A.printArray();
        System.out.println("Correct Answer is\n6 2 \nArray load
is 2");
         */

        //Uncomment this section to test Ex5 a
        /*
        System.out.println("--------------------------------");
        A.setElementAtIndex(7, 1);
        System.out.println("After set value at index 1 to 7 ");
        System.out.println("Your Answer is");
        A.printArray();
        System.out.println("Correct Answer is\n6 7 \nArray load
is 2");
         */

         //Uncomment this section to test Ex5 b
        /*
        System.out.println("--------------------------------");
```

```
        System.out.println("Your Answer is");
        System.out.println("Value at A[1]= " +
A.getElementAtIndex(1));
        System.out.println("Correct Answer is\nValue at A[1]=
7");
     */
   }

}
```