Programming Using Arrays

1. WAP to input n numbers in an array & find the product of all its elements.
2. WAP to input n numbers in an array & find the average of all its elements.
3. WAP to input n numbers in an array & print all even numbers.
4. WAP to input n numbers in an array & print maximum integer.
5. WAP to input n numbers in an array & print all Prime numbers.
6. WAP to input n numbers in an array & print all Palindrome numbers.
7. WAP to input n numbers in an array & print all Armstrong numbers.

WAP to input n numbers in an array & find the product of all its elements.

```java
import java.util.*;
class product {
 public static void main( )  {
   int n, p=1;
   Scanner sc = new Scanner(System.in);
   System.out.println("Enter the number of
elements of the array");
  n = sc.nextInt( );
  int A[ ] = new int[n];
   System.out.println("Enter the elements of the
array");
  for(int i =0; i< n ; i++) {
    A[i] = sc.nextInt( );
  }
   for(int i=0; i<n; i++) {
    p = p*A[i];
  }
 System.out.println(p);
 }
 }
```

WAP to input n numbers in an array & find the average of all its elements.

```java
import java.util.*;
class average {
 public static void main( ) {
   int n;
   double s=0.0;
   Scanner sc = new Scanner(System.in);
   System.out.println("Enter the size of array");
  n = sc.nextInt( );
  int A[ ] = new int[n];
  System.out.println("Enter the elements of the array");
  for(int i =0; i< n ; i++)  {
   A[i] = sc.nextInt( );
  }
   for(int i=0; i<n; i++) {
    s = s + A[i];
  }
   double avg = s/n;
System.out.println(avg);
 }
 }
```

WAP to input n numbers in an array & print all the even numbers.

```java
import java.util.*;
class even {
 public static void main( ) {
   int n;
   Scanner sc = new Scanner(System.in);
   System.out.println("Enter the size of the array");
   n = sc.nextInt( );
   int A[ ] = new int[n];
   System.out.println("Enter the elements of the array");
  for(int i =0; i< n ; i++) {
  A[i] = sc.nextInt( );
  }
  for(int i=0; i<n; i++) {
   if(A[i]%2==0)
    System.out.println(A[i]);
  }
 }
 }
```

WAP to input n numbers in an array & print the maximum integer.

```java
import java.util.*;
class maximum {
 public static void main( ) {
   int n;
   Scanner sc = new Scanner(System.in);
   System.out.println("Enter the size of the array");
   n = sc.nextInt( );
   int A[ ] = new int[n];
   System.out.println("Enter the elements of the array");
  for(int i =0; i< n ; i++) {
  A[i] = sc.nextInt( );
  }
  int max = A[0];
   for(int i=0; i<n; i++) {
    if(A[i]>max)
        max = A[i];
   }
   System.out.println(max);
  }
  }
```

WAP to input n numbers in an array & print all the prime numbers

```java
import java.util.*;
class prime {
 public static void main( ) {
   int n;
   Scanner sc = new Scanner(System.in);
   System.out.println("Enter the size of the array");
   n = sc.nextInt( );
   int A[ ] = new int[n];
   System.out.println("Enter the elements of the array");
  for(int i =0; i< n ; i++) {
  A[i] = sc.nextInt( );
  }
   for(int i=0; i<n; i++) {
      int c=0;
    for(int j=2;j<A[i];j++) {
       if(A[i]%j==0)
        c++;
     }
    if(c==0)
     System.out.println(A[i]);
  }
}
}
```

WAP to input n numbers in an array & print all the palindrome numbers

```java
import java.util.*;
class palindrome {
 public static void main( ) {
   int n;
   Scanner sc = new Scanner(System.in);
   System.out.println("Enter the size of the array");
   n = sc.nextInt( );
   int A[ ] = new int[n];
   System.out.println("Enter the elements of the array");
  for(int i =0; i< n ; i++) {
  A[i] = sc.nextInt( );
  }
   for(int i=0; i<n; i++) {
      int r=0;
      int t= A[i];
      while(t>0){
       int d = t%10;
       r = r * 10 + d;
       t = t/10;
      }
      if(r = =A[i])
       System.out.println(A[i]);
  }
}
```

WAP to input n numbers in an array & print all the Armstrong numbers

```java
import java.util.*;
class armstrong{
 public static void main( ) {
   int n;
   Scanner sc = new Scanner(System.in);
   System.out.println("Enter the size of the array");
   n = sc.nextInt( );
   int A[ ] = new int[n];
   System.out.println("Enter the elements of the array");
  for(int i =0; i< n ; i++) {
  A[i] = sc.nextInt( );
  }
  for(int i=0; i<n; i++) {
     int s=0;
     int t= A[i];
     while(t>0){
      int d = t%10;
      s = s + (d*d*d);
      t = t/10;
      }
     if(r = =A[i])
      System.out.println(A[i]);
 }
```

Happy Learning!!