

## Algorithm

Aim: To print the first largest and second largest numbers in a array.

1). Start

2). main() – a). Input a number as n for number of columns and rows.

b). if( $n < 20$ )

{

int a[][] = new int[n][n];

System.out.println("Enter the elements for the matrix");

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

{

for(int j=0; j<n ;j++)

{

a[i][j] = br.nextInt();

}

}

System.out.println("\nORIGINAL MATRIX");

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

{

for(int j=0; j<n ;j++)

{

System.out.print(a[i][j]+" ");

}

System.out.println();

}

int largest = 0;

int lrow = 0;

int lcolumn = 0;

```

for(int i=0; i<n ;i++)
{
    for(int j=0; j<n ;j++)
    {
        if(a[i][j] > largest)
        {
            largest = a[i][j];
            lrow = i;
            lcolumn = j;
        }
    }
}

```

```

int slargest = 0;
int slrow = 0;
int slcolumn = 0;
for(int i=0; i<n ;i++)
{
    for(int j=0; j<n ;j++)
    {
        if(a[i][j] > slargest && a[i][j] < largest)
        {
            slargest = a[i][j];
            slrow = i;
            slcolumn = j;
        }
    }
}

```

```

System.out.println("\nLargest Number: "+largest+", at index ["+lrow+"["+lcolumn+"]");
System.out.println("Second Largest Number: "+slargest+", at index
["+slrow+"["+slcolumn+"]");
}

```

```
c). else
{
    System.out.println("Range out of bounds");
}
```

3). Stop