# Algorithm

Aim: To print all the prime numbers in a Matrix along with their row and column index.

1). Start

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

b). if(n>1&&n<11)

```
{
   int a[][] = new int[n][n];
   System.out.println("Enter the elements for the array");
   for(int i=0; i<n; i++)
   {
      for(int j=0; j<n; j++)
      {
         a[i][j] = br.nextInt();
      }
   }

   System.out.println("ORIGINAL MATRIX");
   for(int i=0; i<n; i++)
   {
      for(int j=0; j<n; j++)
      {
         System.out.print(a[i][j]+"  ");
      }
      System.out.println();
   }

   System.out.println("PRIME\tROW INDEX\tCOLOUMN INDEX");
   for(int i=0; i<n; i++)
   {
      for(int j=0; j<n; j++)
      {
         boolean check = false;
```

```
                for(int p=2;p<=a[i][j]/2;p++)
                {
                   if(a[i][j]%p==0)
                   {
                      check = true;
                      break;
                   }
                }
                if(!check && a[i][j]>1)
                {
                   System.out.println("  "+a[i][j]+"\t    "+i+"\t\t       "+j);
                }
             }
          }
       }
```

c). else

System.out.println("Range out of bounds");

3). Stop