Algorithm

Aim: To sort the left diagonal of matrix.

1). Start

2). main() – a). Input two numbers r and c as the number of rows and columns for the matrix

b). int a[][]=new int[r][c];

c). System.out.println("Enter The Elements Of The Array");

```
for(int i=0;i<r;i++)
{
   for(int j=0;j<c;j++)
   {
      a[i][j]=br.nextInt();
   }
}
```

d). System.out.println("Elements Of The Array");

```
for(int i=0;i<r;i++)
{
   for(int j=0;j<c;j++)
   System.out.print(a[i][j]);
   System.out.println();
}
```

e).

```
for(int i=0;i<r;i++)
   {
      for(int j=1;j<c;j++)
      {
         for(int k=0;k<r-j;k++)
         {
            if(a[k][k]>a[k+1][k+1])
            {
               int t=a[k][k];
```

```
                    a[k][k]=a[k+1][k+1];
                    a[k+1][k+1]=t;
                }
            }
        }
    }
```

f).
```
for(int i=0;i<r;i++)
    {
        for(int j=1;j<c;j++)
        {
            for(int k=0;k<r-j;k++)
            {
                if(a[k][k]>a[k+1][k+1])
                {
                    int t=a[k][k];
                    a[k][k]=a[k+1][k+1];
                    a[k+1][k+1]=t;
                }
            }
        }
    }
```

3). Stop