## Step-1

When *n* is even, clearly  $\frac{n}{2}$  interchanged grows are required to get into normal order of rows. And when n is odd, the middle row is exactly in its own place and we need  $\frac{n-1}{2}$  interchanges to get into normal order or rows.

$$\frac{\left(\frac{R_n}{2},R_{\frac{n}{2}+1}\right)}{\left(R_1,R_n\right),\left(R_2,R_{n-1}\right)......}$$
 Therefore, in these cases, the required interchanges are  $\left(R_1,R_n\right),\left(R_2,R_{n-1}\right)......\left(\frac{R_{\frac{n-1}{2}},\frac{R_{n+1}}{2}}{2}\right)$