```
class
Solution
{
                public void nextPermutation(int[] nums) {
                    int index=-1;

                    for(int i=1;i<nums.length;i++)
                    {
                        if(nums[i-1]<nums[i])
                        {
                            index=i;
                        }
                    }

                    if(index==-1)
                    {
                        Arrays.sort(nums);
                        return;
                    }
                    int swapIndex=index;
                    //finding the element which is greater then second peak and less then peak;
                    for(int i=index;i<nums.length;i++)
                    {
                        if(nums[i]>nums[index-1]&&nums[i]<nums[swapIndex])
                        {
                            swapIndex=i;
                        }
                    }

                    nums[index-1]=nums[index-1]^nums[swapIndex];
                    nums[swapIndex]=nums[index-1]^nums[swapIndex];
                    nums[index-1]=nums[index-1]^nums[swapIndex];

                    Arrays.sort(nums,index,nums.length);

                }
```