

```

class Queens{
    public static void main(String[] args){
        int [] A = {1, 2, 3, 4};
        for(int i=0; i<25;i++){
            nextPermutation(A);
            printArray(A);
        }
    }

    static void nextPermutation(int [] A){
        int pivot=0;
        int successor=0;
        //for(int i = 0; i<=A.length;i++){
        for(int i =A.length-2; i>=1; i--){
            if(A[i]<A[i+1]){
                pivot = i;
                break;
            }
        }

        for(int i=A.length-1; i>pivot; i--){
            if(A[i]> A[pivot]){
                successor = i;
                break;
            }
        }
        if(pivot!=-1){
            for(int i = 0; i< A.length/2; i++){
                reverse(A, pivot+1, A.length-1 );
            }
            return;
        }
        swap(A, pivot, successor);
        reverse(A ,pivot+1, A.length-1);
        return;
    }

    static void swap(int [] A, int i, int j){
        int temp = A[i];
        A[i] = A[j];
        A[j] = temp;
    }
}

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```
        static void reverse(int[] A, int i, int j){
            while(i < j){
                swap(A, i, j);
                i++;
                j--;
            }
        }
        static void printArray(int[] A){
            System.out.print("(");
            for(int i=0; i<=A.length-1; i++){
                System.out.print(A[i]+" ");
            }
            System.out.println(")");
        }
    }
```