```
/*
 *      A program which displays all permutations of a word
 *      (entered in the command line).
 *
 *      Example :
 *        (word = "ABC")
 *              ABC
 *              ACB
 *              BAC
 *              BCA
 *              CAB
 *              CBA
 */

class Permutations {
        public static void main (String[] args) {
                String word = (args.length == 0)? "DEFAULT" : args[0].toUpperCase();
                permute("", word);
        }
        public static void permute (String prefix, String str) {
                if (str.length() == 0)
                        System.out.println(prefix);
                for (int i = 0; i < str.length(); i++)
                        permute(prefix + str.charAt(i),
                                str.substring(0, i) + str.substring(i + 1));
        }
}

/*
 *      Variable Description :
 *      ------------------------------------------------------------------------------
 *      Serial no. |    Variable name   |      Data type      |       Purpose
 *      ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
 *         1       |    word            |      String         | Stores the word
 *                 |                    |                     | entered
 *      -----------+--------------------+---------------------+------------------------
 *         2       |    prefix          |      String         | Stores the partially
 *                 |                    |                     | created permutation
 *      -----------+--------------------+---------------------+------------------------
 *         3       |    str             |      String         | Stores the remaining
 *                 |                    |                     | word, after letters
 *                 |                    |                     | are pulled into the
 *                 |                    |                     | (prefix)
 *      ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
 */
```