# **RECURSION: LETTER PERMUTATIONS**

**Lab Description:** Write a program that takes in a string of unique characters and generates all possible permutations of the letters.

## Sample Data:

ABC abc boat it

### Files Needed ::

Permutation.java PermuRunner.java

## **Sample Output:**

```
PERMUTATION OF WORD :: ABC
ABC
ACB
BAC
BCA
CAB
CBA
PERMUTATION OF WORD :: abc
abc
acb
bac
bca
cab
cba
PERMUTATION OF WORD :: boat
boat
bota
baot
hato
btoa
btao
obat
obta
oatb
otba
otab
abot
abto
aobt
aotb
atbo
atob
tboa
tbao
toba
toab
tabo
taob
PERMUTATION OF WORD :: it
it
```

ti

#### algorithm help

If the length of new and original string match print out new String else

loop from beginning to end of original if the current char in original does not exist

in new string

recursive call with original and new plus current char