Permutation Implementation

permutation("abc",0,2)

i=0	
$\operatorname{swap}(0,0)$	
permutations("abc",1,2)	
swap(1,1)	$ \operatorname{swap}(1,2) $
permutations("abc",2,2)	permutations("acb",2,2)
output "abc"	output "acb"
swap(1,1)	swap(1,2)
"abc"	"abc"
swap(0,0) "abc"	
"abc"	
i=1	
$\operatorname{swap}(0,1)$	
permutations("bac",1,2)	
swap(1,1)	swap(1,2)
permutations("bac",2,2)	permutations("bca",2,2)
output "bac"	output "bca"
swap(1,1)	swap(1,2)
"bac"	"bac"
$\operatorname{swap}(0,1)$	
"abc"	
i=2	
$\operatorname{swap}(0,2)$	
permutations("cba",1,2)	
swap(1,1)	swap(1,2)
permutations("cba",2,2)	permutations("cab",2,2)
output "cba"	output "cab"
swap(1,1)	swap(1,2)
"cba"	"cba"
$\operatorname{swap}(0,2)$	
"abc"	