[Write a program in C to print all permutations of a given string using pointers](https://github.com/orgs/alvas-education-foundation/teams/final-year-2019-20-batch/discussions/287)\*/

#include <stdio.h>  
#include <string.h>

/\* Function to swap values at two pointers \*/  
void swap (char \*x, char \*y)  
{  
char temp;  
temp = \*x;  
\*x = \*y;  
y = temp;  
}  
/ End of swap() \*/

/\* Function to print permutations of string \*/  
void permute(char \*a, int i, int n)  
{  
int j;  
if (i == n)  
printf("%s\n", a);  
else {  
for (j = i; j <= n; j++)  
{  
swap((a + i), (a + j));  
permute(a, i + 1, n);  
swap((a + i), (a + j)); //backtrack  
}  
}  
}

/\* The main() begins \*/  
int main()  
{  
char a[20];  
int n;  
printf("Enter a string: ");  
scanf("%s", a);  
n = strlen(a);  
printf("Permutaions:\n");  
permute(a, 0, n - 1);  
getchar();  
return 0;  
}