

Write a C program to print all permutations of a given string using pointers.

```
#include <stdio.h>

#include <string.h>

void swap (char *x, char *y)
{
    char temp;
    temp = *x;
    *x = *y;
    *y = temp;
}

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
        }
    }
}

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;  
}
```