6. Write a program in C 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));
      }
   }
}
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;
}
```

Output: