

## Assignment 8: Pointer

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

The permutations of the string are : abcd abdc acbd acdb adcb adbc bacd badc bcad bcda  
bdca bdac cbad cbda cabd cadb cdab cdba dbca dbac dcba dcab dacb dabc

2. Program to create, initialize, assign and access a pointer variable.
3. Program to swap two numbers using pointers.
4. Modify value stored in other variable using pointer in C
  - a. Initialize the pointer with the other (normal variable whose value we have to modify) variable's address.
  - b. Update the value

5. Solve the following

```
void increment(int *v) {  
    (*v)++;  
}  
  
int main() {  
  
    int a;  
  
    scanf("%d", &a);  
  
    increment(&a);  
  
    printf("%d", a);  
  
    return 0;
```

}

You have to complete the function `void update(int *a,int *b)`, which reads two integers as argument, and sets ***a*** with the sum of them, and ***b*** with the absolute difference of them.

$$a' = a + b$$

$$b' = |a - b|$$

### **Input Format**

Input will contain two integers, ***a*** and ***b***, separated by a newline.

### **Output Format**

You have to print the updated value of, ***a*** and ***b***, on two different lines.