**Computing Fundamentals & Programming**

**Assignment 8**

**Question 1**

Write a C++ program that reads an integer number from the user as an input. It should then separate the digits and store each in an array. The user can enter up to 8 digits. The program prints a new number on the using the following rule:

Numbers with the odd number of digits is rotated about the middle number and even numbers are rotated about the 2 middle digits. In order to understand this question, see the example below. The numbers having the same color are swapped to produce the rotated new number:

Example 1: User Entered 12345 then program should print 54321

Example 2: User Entered 123456 then program should print 653421

**Question 2**

Write a program to calculate pow(x,n), x, and n are two integers. write a function to compute x^n.

**Question 3**

Write a C++ program that will read two numbers from the user and perform the following operations i.e. add, subtract, multiply, divide and remainder (sort of calculator) by using pointers. There should be one function against one functionality. e.g. int sum(-------)