Lab Report 03

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**Problem**

Write a program that recursively prints the sum of all combinations of 5 randomly selected integers. Single values are also included in the print out.

**Solution**

This lab is like combinations in mathematic. Recursive methods can repeat or call itself to solve large problem. This kind of method is very similar to loop, but it doesn’t have parentheses. It is a little difficult to track. Therefore, just use recursive methods and watch tracking, we can use fewer code to complete combination.

**Implementation Problems Encountered**

In the beginning, I was confused about the sequence of Recursive methods, so I write a very simple code at bottom to understand.

**Lab Report Questions**

1. **Describe the similarities between using recursion versus iteration.**  
   a. Both iteration and recursion are based on a control structure

b. Recursion and iteration both repeatedly execute the set of instructions

c. Both iteration and recursion involve repetition

1. **Describe the difference between using recursion versus iteration.**  
   Recursion is a process, always applied to a function and iteration is applied to the set of instructions which we want to get repeatedly executed.

*sumandprintcomb*(a, **new** **int**[1],0,1);{

*sumandprintcomb*(a,c,currI+1,currD+1);{

*sumandprintcomb*(a,c,currI+1,currD);{

print

}

}

}