**Name of Student: Raheel Kotwal**

**Roll Number: 45**

**Experiment Number: 8**

**Title: Pascal Triangle**

**Theory:**  The following code is used to print the pascal triangle where first loop is used for number of columns and the nested 1st loop prints the number of spaces, the next prints the numbers on basis of coefficient as pascal triangle increases and then decreases.

**Code:**

**#include <iostream>**

**using namespace std;**

**int sumOfDigits(int num) {**

**if (num < 10) {**

**return num;**

**}**

**return sumOfDigits(num % 10 + sumOfDigits(num / 10));**

**}**

**int main() {**

**int number;**

**cout << "Enter a number: ";**

**cin >> number;**

**int result = sumOfDigits(number);**

**cout << "Sum of digits until it becomes a single-digit number: " << result << endl;**

**return 0;**

**}**

**Output:(screenshot):**

