Q1: Define Software Engineering and Describe the Life Cycle of the Program that you built in the Lab.

(10 Marks)

Q2: Answer Six of The Following (5 Marks for each one)

1- Define the Object Oriented Technology and Explain the Component-based Development.

2- List and Explain the Attributes of Good Software.

3- What are the benefits of Automated Estimation Tools?

4- Describe why all Analysis Methods is Related by a set of Operational Principles.

5- Why Requirement Analysis is Important, what are the Phases of Software requirement analyses?

6- What mean by Function Oriented Metrics. Analyze the Information Domain, How can compute the Productivity, Quality, Cost and Document.

7- Describe the attribute of Good Test Case.

Q3: Test and Compute the Cyclomatic Complexity for this sub Program (10 Marks)

```c
{   int x = 1; count = 0; y = 0; x = 0;

    while (item < n) readint (x);

    {   if (x >= 50)
        count = count + 1
        else
        y = y + 1;

    }  

    if count = n
    write ("pass")
    else
    write ("fail", y)

}```