Algorithms For assignment

1 ) Bool Vector : Vector <T> :: add(const T &element)

If m\_numelement >= capacity

Capacity x 2

ELSE m\_array[m\_numelement++] = userinput

If pointer ! = nullptr

Loop to num of element

Assign temp array to current array

ELSE

Return false

2 ) Vector<T> :: InsertAt(const int &index,const T &element)

If index > = 0

If index < m\_numElement

If m\_numelement == capacity

Capacity x 2

FOR m\_numelement >= index

M\_array +1 = m\_array

M\_array = element

M\_numelement ++

ELSE

Index out of range

3 ) Vector<T> :: modifyAt(const int &index, const T& mod)

If Index > m\_numelement

M\_numelement = index

M\_array at index = mod

If index > capacity

M\_capacity = index x 2

4)

void Vector <T> :: deletefrom( const int &indexOne, const int &indexTwo)

If indexOne > 0 and index one < m\_numelement

ELSE

END

If indexTwo >= indexone and indextwo < m\_numelement

Temp array = capacity

For int < lower index

Temp array = m\_array

If indexTwo > m\_element

Temparray [indexone] = m\_array[indexTwo]

Index ++

Element count ++

M\_capacity x 2

M\_num = new count element