// While (Leaf_Node_Link_List has Not been Traversed Completely )//

While (Leaf_Node != Null )
{
        Magzine/Journals )
        Then { If ( (Leaf-Node .Parent = NN/NNP/NNS) And (Leaf-Node. Grand_parent) = NP) )
            Then { If ( Stirng Item-Type = Null)
                Then Stirng Item-Type = “ Item-Type = “ + Leaf-Node.Info
                Else Stirng Item-Type = Stirng Item-Type + “OR” + Leaf-Node.Info
            }
            Leaf_Node = Leaf_Node .Next
            GoTo While ;
        }
    If (Leaf-Node.Info = Authored/written)
        Then If ( (Leaf-Node .Parent = VBN/VBP ) And (Leaf-Node .Grand_parent = VP) )
            Then String Author = “ Author = “
            If ( ( Leaf_Node.Next.Info = By ) And ( Leaf_Node.Next.Parent = IN)
                And ( Leaf_Node.Next. Grand_Parent = PP)
                And ( Leaf_Node.Next. Uncle = NP )
                And ( Leaf_Node.Next. Cousin =(NN And CC And NN) Or
                    (NN And NN) Or (NN) Or( NP And CC And NP )Or ( NP And ADJP)
                    Or (NN And NN And CC And NN ) Or (NN And NN And NN) )
            )
Then Ancestor_Node = Leaf_Node.Next. Uncle

Leaf_Node = Leaf_Node.Next

Leaf_Node = Leaf_Node.Next

While (Ancestor(Ancestor_Node, Leaf_Node) = True)
  {
    String Author = Author + Leaf_Node.Info
    Leaf_Node = Leaf_Node.Next
  }

GoTo While;

If (Leaf_Node.Next.Info = By) And (Leaf_Node.Next.Parent = In)
  And (Leaf_Node.Next.Grand_Parent = PP)
  And (Leaf_Node.Next.Uncle = NP)
  And (Leaf_Node.Next.Cousin = (NP And PP) Or (NP And VP))
Then Leaf_Node = Leaf_Node.Next

Ancestor_Node = Cousin (Leaf_Node, NP, Info)

Leaf_Node = Leaf_Node.Next

While (Ancestor(Ancestor_Node, Leaf_Node) = True)
  {
    String Author = Author + Leaf_Node.Info
    Leaf_Node = Leaf_Node.Next
  }

GoTo While;

If (Leaf-Node.Info = on) And (Leaf_Node.Parent.Info = IN)
  And (Leaf_Node.Grand_parent.info = PP)
Then {
  Ancestor_Node = Leaf_Node.Grand_parent
  String KeyWords = “KeyWords = “
  Leaf_Node = Leaf_Node.Next
}
While ( (Ancestor (Ancestor_Node, Leaf_Node) = True) 
And (Desdent_Ascdent (Ancestor_Node, Leaf_Node, Info) != VP ) )
{
    If ( Leaf_Node.Info = And )
    Then Leaf_Node.Info = Or
        KeyWords = KeyWords + Leaf_Node.Info
        Leaf_Node = Leaf_Node.Next

}

GoTo While ;

}
Leaf_Node = Leaf_Node.Next

} End Main While

String SQL_Query = select * from library_Table where

If Item_Type != Null
Then SQL_Query = SQL_Query + Item_Type

If String Author != Null
Then SQL_Query = SQL_Query + Author

If String KeyWords != Null
Then SQL_Query = SQL_Query + KeyWords