```
function [i_append, j_append, val_append] = Assemble_NoBC(m,fespace)
```

Function: Assemble_NoBC

Author: VigneshRamakrishnan RIN: 662028006 Date: November 21, 2021 Code Version: 1.0 This function performs the act of assembling the local element stiffness matrix to the Global Stiffness matrix. Inputs: m - local element stiffness matrix to assemble fespace - the finite element space of the corresponding element Outputs: i_append - the 'i' idx of the Global Sparse Matrix to append j_append - the 'j' idx of the Global Sparse Matrix to append val_append - the value to add at the 'i,j' location of the Global Sparse Matrix

```
% No Boundary conditions are applied in this assembly process
i_append = [];
j_append = [];
val_append = [];
n = length(m);
k = 1;
for i=1:n
    eq_num = fespace.ElemDOF(i);
        for j=1:n
            col = fespace.ElemDOF(j);
            i_append(k,1) = eq_num;
            j_append(k,1) = col;
            val_append(k,1) = m(i,j);
            k = k + 1;
        end
end
end
```

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