```python
### Patch Test for 1 element required some Analytical values of
### displacements and relaxed strain.
### So, here we use this equation to get the analytical values.

import numpy as np

### Initialize List for the new coordintes of the deformed nodes.
New_displacement = []
New_Relaxed_Strain = []

### Analytical Equations for displacements u1 and u2 of nodes :
def Displacement(x,y):
    u1 = -0.005*x*x + 0.01*y*y
    u2 = -0.01*x*x+0.005*y*y
    return [u1,u2]

### Analytical Equations for relaxed strain psi11,psi21,psi12 and psi22 of nodes :
def Relaxed_Strain(x,y):
    psi_1 = -0.01*x
    psi_2 =  0.02*y
    psi_3 = -0.02*x
    psi_4 =  0.01*y
    return [psi_1,psi_2,psi_3,psi_4]


### X and Y coordinates of the all nine nodes of the Element :
x_disp = np.array([0,1,1,0,0.5,1,0.5,0,0.5])
y_disp = np.array([0,0,1,1,0,0.5,1,0.5,0.5])

### X and Y coordinates of the corner nodes of the Element :
x_strain = np.array([0,1,1,0])
y_strain = np.array([0,0,1,1])

### Find the new coordintes of the deformed nodes :
New_displacement = Displacement(x_disp,y_disp)

### Find the relaxed strain values at corner nodes :
New_Relaxed_Strain = Relaxed_Strain(x_strain,y_strain)

### Print the Old_values of the nodes coordintes:
print("The old values of nodes coordintes x_old :")
print(x_disp)
print()
print("The old values of nodes coordintes y_old :")
print(y_disp)
print()

### Print the New_values of the nodes coordintes:
print("The New values of displaced nodes coordintes x_new and y_new :")
print(New_displacement)
print()

### Print the Relaxed strain values at the corner nodes.
print("Relaxed strain values at each corner nodes Psi_11,Psi_21,Psi_12,Psi_22 :")
print(New_Relaxed_Strain)
```