
```
function z = tensorproduct2D_lagrange(xy, pointx, pointy, pointz)
```

```
x = xy(1,:);  
y = xy(2,:);  
nxy = size(xy,2);
```

```
% create the 1D interpolation matrices
```

```
Lx = lagrange1D(x,pointx);  
Ly = lagrange1D(y,pointy);  
nxi = length(pointx);  
nyi = length(pointy);
```

```
L = ones(nxy,nxi*nyi);
```

```
for i = 1:nxi  
    L(:,(i-1)*nyi+(1:nyi)) = (Lx(:,i)*ones(1,nyi)).*Ly;  
end
```

```
z = L*pointz';  
end
```

```
Not enough input arguments.
```

```
Error in tensorproduct2D_lagrange (line 3)  
x = xy(1,:);
```

Published with MATLAB® R2021b