

---

```
function value=lagrng(X,Y,x)
```

```
    value= 0;
```

```
    n= size(X,2);
```

```
    for i=1:n
```

```
        term=Y(i);
```

```
        num=1;
```

```
        den=1;
```

```
        for j=1:n
```

```
            if i==j
```

```
                continue;
```

```
            else
```

```
                num=num*(x-X(j));
```

```
                den=den*(X(i)-X(j));
```

```
            end
```

```
        end
```

```
        term=term*(num/den);
```

```
        value=value+term;
```

```
    end
```

```
end
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