

## For Loops

```
for index = [array]
    :
    statements
    :
end
```

```
for i = [1 3 7]
    disp(i)
end
```

1  
3  
7

```
for i = 1:4
    disp("hello")
end
```

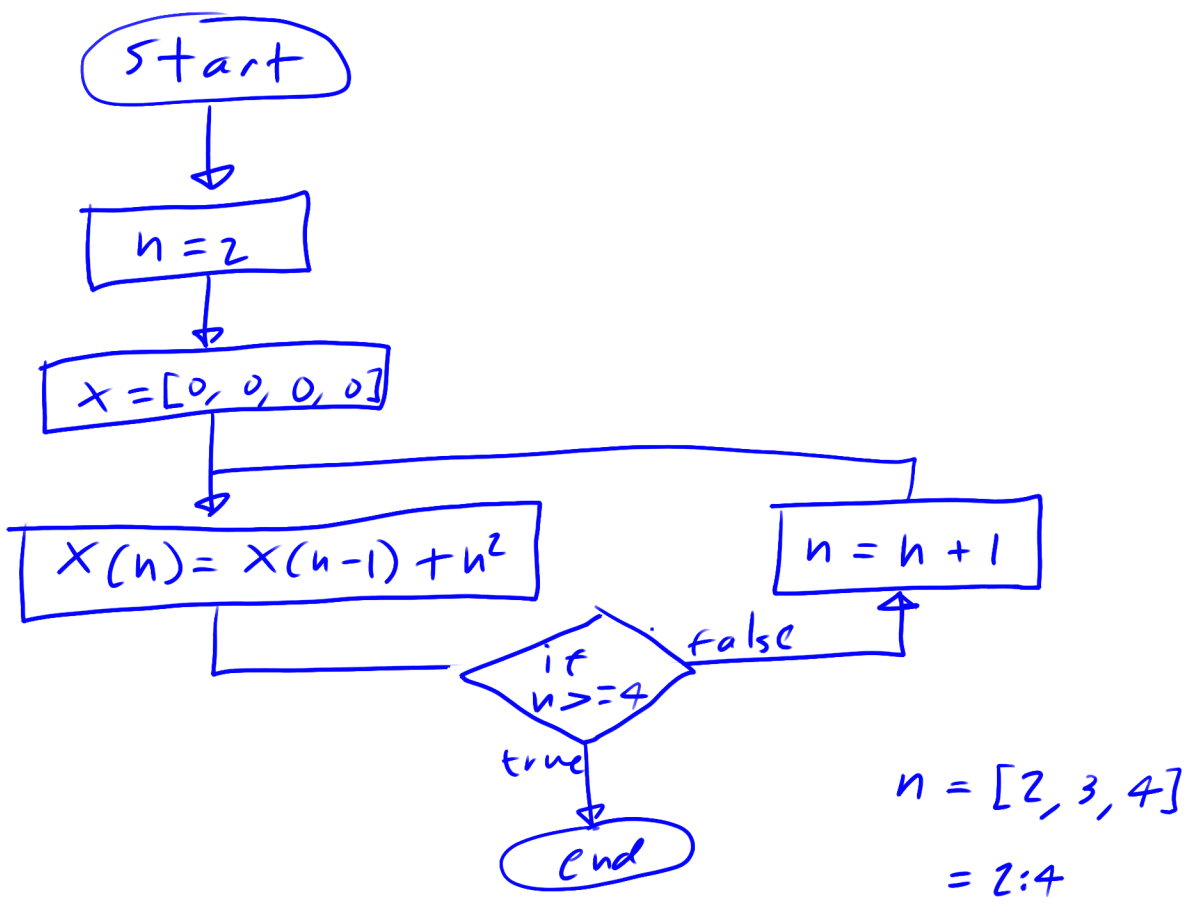
hello  
hello  
hello  
hello

```
X = zeros(3)
for i = 1:3
    X(i) = sqrt(i)
end
```

X = sqrt(1:3)

Vector X with values  $X_n$

$$X_n = X_{n-1} + n^2$$



```
X = zeros(4)
for n = 2:4
    X(n) = X(n-1) + n^2;
end
disp(X)
```

## Breaking loops

```
for i = 1:10
    if i == 5
        break
    end
    disp(i)
end
```

1  
2  
3  
4