Cody Problem 23. Finding Perfect Squares

Given a vector of numbers, return true if one of the numbers is a square of one of the numbers. Otherwise return false.

Example:

```
 % Input  a = [2 3 4]
 % Output b is true
```

Output is true since 2^2 is 4 and both 2 and 4 appear on the list.

Scratch Pad

```
a = [2 3 4];

isItSquared(a)
```

```
ans = 1
```

```

a = [6 10 12 14 36 101];

isItSquared(a)
```

```
ans = 1
```

```

a = [20:30];

isItSquared(a)
```

```
ans = 0
```

Solution

```
function b = isItSquared(a)
    n = length(a);  % Get the length of vector a
    b = false(1, n);  % Initialize a logical array to store the results

    for i = 1:n
        if any(a(i)^2 == a)
            b(i) = true;
        end
    end
    b = sum(b);
end
```