Cody Problem 15. Find the longest sequence of 1's in a binary sequence

Given a string such as

```
% s = '011110010000000100010111'
```

find the length of the longest string of consecutive 1's. In this example, the answer would be 4.

Example:

```
% Input  x = '110100111'
% Output y is 3
```

Scratch Pad

```
x = '011110010000000100010111';

lengthOnes(x)
```

```
ans = 4
```

```
x = '110100111';

lengthOnes(x)
```

```
ans = 3
```

```
x = '1';

lengthOnes(x)
```

```
ans = 1
```

```
x = '10';

lengthOnes(x)
```

```
ans = 1
```

Solution

```
function y = lengthOnes(x)
    y = max(diff([0, find(x == '0'), length(x) + 1]) - 1);
end
```