1. Create a function that takes the width, height and character and returns a picture frame as a 2D list.

#### **Examples**

```
get_frame(4, 5, "#") [
    ["####"],
    ["# #"],
    ["# #"],
    ["###"]
]
# Frame is 4 characters wide and 5 characters tall.
```

```
get_frame(10, 3, "*") |
["*******"],
["* *"],
["*******"]
```

# Frame is 10 characters and wide and 3 characters tall.

```
get_frame(2, 5, "0") "invalid" # Frame's width is not more than 2.
```

- 2. Write three functions:
  - 1. boolean and
  - 2. boolean or
  - 3. boolean xor

These functions should evaluate a list of True and False values, starting from the leftmost element and evaluating pairwise.

# **Examples**

```
boolean_and([True, True, False, True]) False
# [True, True, False, True] => [True, False, True] => [False, True] => False
boolean_or([True, True, False, False]) True
# [True, True, False, True] => [True, False, False] => [True, False] => True
boolean_xor([True, True, False, False]) False
# [True, True, False, False] => [False, False] => [False, False] => False
```

3. Create a function that creates a box based on dimension n.

#### **Examples**

```
make_box(5) [
"####",
"# #",
"# #",
"###"
]

make_box(3) [
"###"
]

make_box(2) [
"##",
"##"
]

make_box(1) [
"#"
]
```

4. Given a common phrase, return False if any individual word in the phrase contains duplicate letters. Return True otherwise.

## **Examples**

```
no_duplicate_letters("Fortune favours the bold.") True

no_duplicate_letters("You can lead a horse to water, but you can't make him drink.") True

no_duplicate_letters("Look before you leap.") False

# Duplicate letters in "Look" and "before".

no_duplicate_letters in "Look" and "before".
```

# Duplicate letters in "apple", "keeps", "doctor", and "away".

5. Write a regular expression that will match the states that voted yes to President Trump's impeachment. You must use RegEx positive lookahead.

### Example

txt = "Texas = no, California = yes, Florida = yes, Michigan = no" pattern = "yourregularexpressionhere"

re.findall(pattern, txt) ["California", "Florida"]