1.Create a function that returns true if a string contains any spaces.

** Examples

hasSpaces("hello") → false

hasSpaces("hello, world") → true

hasSpaces(" ") → true

hasSpaces("") → false

hasSpaces(",./!@#") → false

```
function Space (c){
    return /\s/i.test(c)
}
console.log(Space("hello simplon"));
```

2.Create a function that takes a string and returns the number (count) of vowels contained within it.

** Examples

countVowels("Celebration") → 5
countVowels("Palm") → 1
countVowels("Prediction") → 4

```
function vowels(str){
let pattern =/[aeiouy]/gi
let found = str.match(pattern);
 if(found== null) return 0 ;
else
return found.length;
 }
 console.log(vowels("simplon"));
```

3.Create a function that takes a string and character as arguments and replaces all the vowels in a string with character.

** Examples

replaceVowels("the aardvark", "#") ➞ "th# ##rdv#rk"
replaceVowels("minnie mouse", "?") ➞ "m?nn?? m??s?"

```
function vowels(str, symbol){

  return str.replace(/[aeiuo]/gi,symbol)
}
console.log(vowels("simplon", "#"));
```

4.Create a function that takes an input (e.g. "5 + 4") and returns true if it's a mathematical expression or false if not.

mathExpr("4 + 5") ➞ true
mathExpr("4*6") ➞ true
mathExpr("4*no") ➞ false

```
function math(str)
{
   let pattern= /([-+/*\s]\d+(\s\.\d+)?)/;
   return pattern.test(str):
   }
   console.log(math('2+1'));
```

5.Create a function that takes a string as argument and return whether a string contains the characters "a" and "c" (in that order) with any number of characters (including zero) between them
Use the .test() method in your function

asterisk("bbbccount") → false
asterisk("abbbccount") → true
asterisk("abccount") → true
asterisk("account") → true

```
function hasString(str) {
  regexp =/a[a-z]*c/gi
    if (regexp.test(str)){
    return true
  } else {
    return false
  }
}
console.log(hasString("acccccccc"))
```

6.Create a function that takes a string as argument and write a regular expression that matches a string if and only if it is a valid zip code
Zip Codes must be 5 digits long exactly and only contain numbers.
"20438" → true
"1#368" → false
"202801" → false

```
function zipCode(str)
{
 regexp = /^[0-9]{5}?$/;
```

```
        if (regexp.test(str))
          {
            return true;
          }
        else
          {
            return false;
          }
}
console.log(zipCode(55555));
```
