

# Worksheet 4 - regular expressions I

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Your Name: \_\_\_\_\_

Names of people you worked with: \_\_\_\_\_

- Introduce yourself. What is the most challenging thing you have to do in the next 10 days?
- What classes are you taking in the spring? How many of them are SDS?

## Task:

The Jewish Festival of Lights is written as **חנוכה** in Hebrew and translated to many different spellings in English. The correct English spelling of the holiday can be given in any of the following thirteen variants, according to <https://www.holidays.net/chanukah/spelling.htm>.

```
lights <- c("Chanuka", "Chanukah", "Chanukkah", "Channukah", "Hanukah",  
           "Hannukah", "Hanukkah", "Hanuka", "Hanukka", "Hanaka", "Haneka",  
           "Hanika", "Khanukkah")
```

```
lights
```

```
[1] "Chanuka" "Chanukah" "Chanukkah" "Channukah" "Hanukah" "Hannukah"  
[7] "Hanukkah" "Hanuka" "Hanukka" "Hanaka" "Haneka" "Hanika"  
[13] "Khanukkah"
```

Provide a regular expression which will capture all thirteen variants.

**Solution:**

```
[CHK]h?ann?[aeiu]kk?ah?
```

```
grepl("[CHK]h?ann?[aeiu]kk?ah?", lights)
```

```
[1] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE
```