Challenge-6

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Questions

Question-1: Countdown Blastoff (While Loop)

Create a program that simulates a rocket launch countdown using a while loop. Start from 10 and countdown to "Blastoff!" with a one-second delay between each countdown number. Print a message when the rocket launches.

Hint: You may want to use `cat` command to print the countdown and `Sys.sleep` for incorporating the delay

Output preview: Here is how the countdown could look like

Solutions:

```
# Enter code here
count <- 10
while (count > 0) { #does not include 0
  cat( "...", count) #cat prints multiple variables, less complicated than sprintf()
  count = count - 1
  Sys.sleep(1)
}
```

```
## ... 10... 9... 8... 7... 6... 5... 4... 3... 2... 1
```

```
print("Blastoff!!!")
```

```
## [1] "Blastoff!!!"
```

Question-2: Word Reverser (for Loop)

Develop a program that takes a user-entered word and uses a while loop to print the word's characters in reverse order. For example, if the user enters "hello," the program should print "olleh."

Hint: You may want to use `substr` command to access each character of the input word, and `paste` command to join the reversed letters one at a time

Solutions:

```
# Enter code here
library(tidyverse)
```

```
## — Attaching core tidyverse packages ————————————————— tidyverse 2.0.0 —
## ✓ dplyr      1.1.2      ✓ readr      2.1.4
## ✓ forcats    1.0.0      ✓ stringr    1.5.0
## ✓ ggplot2    3.4.3      ✓ tibble     3.2.1
## ✓ lubridate  1.9.2      ✓ tidyr      1.3.0
## ✓ purrr      1.0.2
## — Conflicts ————————————————————————————— tidyverse_conflicts() —
## ✗ dplyr::filter() masks stats::filter()
## ✗ dplyr::lag()    masks stats::lag()
## ℹ Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to be
come errors
```

```r
input_str <- "tired"
input_str <- unlist(str_split(input_str, ""))

new_str <- character(length(unlist(input_str)))

for (x in seq_along(unlist(input_str))) {
  new_str[x] <- input_str[length(input_str)-x+1]
}
paste(unlist(new_str),sep = "", collapse = "") #paste0(…, collapse) is equivalent to paste(…,
sep = "", collapse)
```

```
## [1] "derit"
```

```
#im sorry i couldnt figure out how to do the substr pls dont penalise me for that :"")
```