

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
i <- 10

while (i != 0) {

  cat(paste0(i, "..."))
  i <- i-1
  Sys.sleep(1)
}
```

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

```
cat("Blastoff!")
```

```
## 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
reversify <- function(word) {

  split_word <- strsplit(word, "")
```

```
reverse_word <- paste(rev(split_word[[1]]), collapse="")  
print(reverse_word)  
}
```

```
reversify("test")
```

```
## [1] "tset"
```