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

Solutions:

```r
i <- 10
while (i >= 1) {
  cat(i,"...")
  Sys.sleep(1)
  i <- i - 1
}
```

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

```r
cat("\n","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:

```r
word <- readline(prompt = "Enter a word: ")
```

```
## Enter a word:
```

```r
reversedword <- ""

i <- nchar(word)

while (i > 0) {
  char <- substr(word, i, i)
  reversedword <- paste0(reversedword, char)
  i <- i - 1
}
print(reversedword)
```

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