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
# Enter code here
countdown <- 10

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

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

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

```
## Blastoff!
```

```r
knitr::include_graphics("blastoff.jpeg")
```


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
word <- readline(prompt = "Please enter a word: ")
```

```
## Please enter a word:
```

```
reversed_word <- ""

for (i in nchar(word): 1) {
  reversed_word <- paste(reversed_word, substr(word, i, i))
}

cat("This is your reversed word:", reversed_word)
```

```
## This is your reversed word:
```