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:

```r
# Enter code here
i <- 11
while (i > 1) {
  i <- i-1
  cat(i, fill = T)
  Sys.sleep(1)
}
```

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

```r
knitr::include_graphics("rocket launch.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:

```r
# Enter code here
#Customised Function
entry = ""

reverser <- function(entry){
  i <- nchar(entry)
  splits <- substring(entry,1:i,1:i)
  reversed <- rev(splits)
  paste0(reversed, collapse = "")
 }

reverser("milk")
```

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

```r
#While function
entry = "exam"

i <- nchar(entry)
a <- c()
while (i > 0) {
```

```
  a <- c(a,substr(entry,i,i))
  i <- i-1
}
paste0(a, collapse = "", recycle0 = F)
```

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