9/20/23, 8:40 PM Challenge-6

Challenge-6

INg Chee Ting 2023-09-20

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

for(x in 10:1) {
   Sys.sleep(1)
   cat(x, "...")
}
```

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

```
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:

9/20/23, 8:40 PM Challenge-6

```
# Enter code here

word<-"economics"
reversed_word <- ""
i <-nchar(word)
while(i>0) {
   char <-substr(word, i, i)
   reversed_word <-paste(reversed_word, char, sep="")
   i =i-1
}
cat("The reversed word is:",reversed_word, "\n" )</pre>
```

The reversed word is: scimonoce