RWorksheet_Infiesto#3

Infiesto

2024-10-02

1.

```
#1. There is a built-in vector LETTERS contains the uppercase letters of the alphabetand letters which
#LETTERS

## [1] "A" "B" "C" "D" "E" "F" "G" "H" "I" "J" "K" "L" "M" "N" "O" "P" "Q" "R" "S"
## [20] "T" "U" "V" "W" "X" "Y" "Z"

#letters

## [1] "a" "b" "c" "d" "e" "f" "g" "h" "i" "j" "k" "l" "m" "n" "o" "p" "q" "r" "s"
## [20] "t" "u" "v" "w" "x" "y" "z"
#a. You need to produce a vector that contains the first 11 letters.
elevenLetters <- LETTERS[1:11]
print(elevenLetters)
```

```
##  [1] "A" "B" "C" "D" "E" "F" "G" "H" "I" "J" "K"
```

```
#b. Produce a vector that contains the odd numbered letters.
oddLetters <- LETTERS[seq(1, length(LETTERS), by = 2)]
print(oddLetters)
```

```
##  [1] "A" "C" "E" "G" "I" "K" "M" "O" "Q" "S" "U" "W" "Y"
```

```
#c. Produce a vector that contains the vowels
vowels <- LETTERS[c(1, 5, 9, 15, 21)]
print(vowels)
```

```
## [1] "A" "E" "I" "O" "U"
```

```
#d. Produce a vector that contains the last 5 lowercase letters.
fiveLowercase <- letters[(length(letters) - 4):length(letters)]
print(fiveLowercase)
```

```
## [1] "v" "w" "x" "y" "z"
```

```
#e. Produce a vector that contains letters between 15 to 24 letters in lowercase.
letters15to24 <- letters[15:24]
print(letters15to24)
```

```
##  [1] "o" "p" "q" "r" "s" "t" "u" "v" "w" "x"
```

2.

```
#2. Create a vector(not a dataframe) with the average temperatures in April for Tugue- garao City, Mani

#a. What is the R code and its result for creating a character vector for the city/town of Tuguegarao C
```

```r
city <- c("Tuguegarao City", "Manila", "Iloilo City", "Tacloban", "Samal Island", "Davao City")
city
```

```
## [1] "Tuguegarao City" "Manila"          "Iloilo City"     "Tacloban"
## [5] "Samal Island"    "Davao City"
```

```r
#b. The average temperatures in Celcius are 42, 39, 34, 34, 30, and 27 degrees. Name the object as temp
temp <- c(42, 39, 34, 34, 30, 27)
temp
```

```
## [1] 42 39 34 34 30 27
```

```r
#c. Create a dataframe to combine the city and the temp by using 'data.frame(). What the R code and its
city_temp_df <- data.frame(city, temp)
city_temp_df
```

```
##              city temp
## 1 Tuguegarao City   42
## 2          Manila   39
## 3     Iloilo City   34
## 4        Tacloban   34
## 5    Samal Island   30
## 6      Davao City   27
```

```r
#d. Associate the dataframe you have created in 2.(c) by naming the columns using the names() function.
names(city_temp_df) <- c("City", "Temperature")
city_temp_df
```

```
##              City Temperature
## 1 Tuguegarao City          42
## 2          Manila          39
## 3     Iloilo City          34
## 4        Tacloban          34
## 5    Samal Island          30
## 6      Davao City          27
```