

# Task1

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## Question 1 title

Question description

```
# code for solving task
v1 <- 10.62636237
v2 <- 40L
v3 <- "character variable skjdhfkjshadfjksdhf"
v4 <- TRUE
v5 <- 16+8i
print(c(v1, v2, v3, v4, v5))
```

[1] "10.62636237"  
[2] "40"  
[3] "character variable skjdhfkjshadfjksdhf"  
[4] "TRUE"  
[5] "16+8i"

## Question 2

Question description

```
# code for solving task
sequence_vector <- 5:25
number_vector <- c(3.14, 2.71, 0.13)
true_vector <- rep(TRUE,100)
```

## Question 3

Question description Create the next matrix:

12	34	87
-12	-12.1	0
3.6	0.5	1.3

```
# code for solving task
my_data <- matrix(c(12,34,87,-12,12.1, 0, 3.6, 0.5, 1.3), nrow=3)
print(my_data)
```

```
      [,1] [,2] [,3]
[1,] 12.0 34.0 87.0
[2,] -12.0 12.1  0.0
[3,]  3.6  0.5  1.3
```

## Question 4

Question description : Create a **list** with all atomic types.

```
# code for solving task
my_list <- list(
  integer_value = 66L,
  numeric_value = 4.573353,
  character_value = "shvushvvshvhdbdh",
  logical_value = TRUE,
  complex_value = 16+8i
)
my_list
```

```
$integer_value
[1] 66
```

```
$numeric_value
[1] 4.573353
```

```
$character_value
[1] "shvushvvshvhdbdh"
```

```
$logical_value
[1] TRUE
```

```
$complex_value
[1] 16+8i
```

## Question 5

Question description : Create a **factor** with 3 levels: **infant**, **child**, **adult**.

```
# code for solving task
my_factor <- factor(c("big", "avarage" , "small", "small", "ava
levels= c("big", "avarage" , "small"))
my_factor
```

```
[1] big      avarage small  small  avarage big
Levels: big avarage small
```

## Question 6

Question description : Create a **data frame**

```
# code for solving task
age_factor <-factor(c("infant", "child", "adult"), levels= c("i
print(age_factor)
```

```
[1] infant child  adult
Levels: infant child adult
```

## Question 7

Question description : Change column names of the **data frame**.

```
# Example Data Frame
df <- data.frame(
  Column1 = c(1, 2, 3),
  Column2 = c(4, 5, 6),
  Column3 = c(7, 8, 9)
)

# Print the original data frame
print("Original Data Frame:")
```

```
[1] "Original Data Frame:"
```

```
print(df)
```

	Column1	Column2	Column3
1	1	4	7
2	2	5	8
3	3	6	9

```
# Changing the column names
colnames(df) <- c("NewName1", "NewName2", "NewName3")

# Print the updated data frame
print("Updated Data Frame with New Column Names:")
```

```
[1] "Updated Data Frame with New Column Names:"
```

```
print(df)
```

	NewName1	NewName2	NewName3
1	1	4	7
2	2	5	8
3	3	6	9